

ECHO IRELAND

Journal of the
Irish Radio Transmitters Society
December 2008

The Brendan Trophies Additional Awards Announced

See page 8



Society Officers 2008/2009

President:	Fr. Finbarr Buckley EI1CS	021-4346622	buckleyf1@eircom.net
Vice President:	Paul Martin EI2CA	087-2523908	paul@comma.ie
Hon. Vice-Presidents:	Sean Nolan EI7CD	01-2851599	ei7cd@gofree.indigo.ie
	Dave Moore EI4BZ	087-6290574	ei4bz@eircom.net
Auditors:	Brendan De hÓra, EI3GV; Brendan Lynch, EI6GA		
Secretary:	Ger Gervin EI8CC		
Treasurer:	Sean Donelan EI4GK	01-2821420	donelansean@gmail.com
P.R.O.:	Paul Martin EI2CA	087-2523908	paul@comma.ie
AREN Co-Ordinator:	John Ronan EI7IG	086 8167310	ei7ig@aren.ie
Awards Committee:	Peter Grant EI4HX (Chair)	087-9772904	ei4hxperimental@eircom.net
	Pat Fitzpatrick EI2HX, Pat O'Connor EI9HX.		
ComReg Liaison	Sean Nolan EI7CD	01-2851599	ei7cd@gofree.indigo.ie
Contest Manager:	Thos Caffrey EI2JD	087-2953256	thoscaffrey@hotmail.com
EMC:	Brendan Minish EI6IZ	086-2501832	ei6iz.Brendan@gmail.com
EuroCom	Sean Donelan EI4GK	01-2821420	donelansean@gmail.com
Gaeilge:	Pádraig Ó Meachair EI7GK	0404-67658	ei7gk@esatclear.ie
External Awards/WEIC:	Sean Nolan, EI7CD	01-2851599	ei7cd@gofree.indigo.
IARU	Sean Nolan, EI7CD	01-2851599	ei7cd@gofree.indigo.ie
IARUMS	Ger McNamara EI4GXB		
IRTS Shop:	Peter Grant EI4HX	087-9772904	ei4hxperimental@eircom.net
Membership Officer:	Joe Ryan EI7GY	01-2854250	jryan@iol.ie
Morse Testing Co-Ord.:	Sean Donelan EI4GK	01-2821420	donelansean@gmail.com
Chief Morse Tester:	Dan Lloyd EI3AE	01-8382774	danielloyd@eircom.net.
P.O. Box 462	Michael McNamara EI2CL	01-8372493	ei2clmike@eircom.net
Publications Editor:	Dave Moore EI4BZ	021-4883555	ei4bz@eircom.net
Publications Distribution	Sean Donelan EI4GK	01-2821420	donelansean@gmail.com
Radio News Editor:	Charlie Carolan EI8JB	087 6265418	charlie.carolan@gmail.com
Repeater Co-ordinator	John McCarthy EI8JA		
Theory Examination	Sean Nolan EI7CD	01-2851599	ei7cd@gofree.indigo.
	(Sub – Committee Chairman)		
VHF Manager:	Robbie Phelan, EI2IP		
WAI Awards Manager:	Tom Rea EI2GP	093-35523	tomrea@eircom.net
WAI Book Sales:	Noel Mulvihill EI6HW	0906-474726	nfmulvihill@eircom.net
Webmaster:	Joe Ryan EI7GY	01-2854250	jryan@iol.ie

QSL Bureau

QSL Inwards Manager:	Pat Fitzpatrick EI2HX.	041-9841817	patfitzpatrick@hotmail.com
QSL Outwards Manager:	Tony Baldwin EI8JK		
	ei8jk@amsat.org		
Incoming QSL Sub Managers:			
0/1/Calls & SWL:	John Browne EI7FAB.		
2 Series Calls:	Thos Caffrey EI2JD	087-2953256	thoscaffrey@hotmail.com
3 Series Calls:	Pat Fitzpatrick EI2HX.	041-9841817	patfitzpatrick@hotmail.com
4 Series Calls:	Jim Ryan EI3DP	021-4632365	sigma4@oceanfree.net
5 Series Calls	Vacant Volunteer wanted		
6 Series Calls:	Rory Hinchy EI4DJB		rhinchy@iee.org
7 Series Calls	Ger McNamara EI4GXB		ei4gxb@gmail.com
8 Series Calls:	Brian Canning EI8IU	086-2514822	brianei8iu@eircom.net
9 Series Calls:	Dave Deane EI9FBB	083-3317940	ei9fbb@oceanfree.net

News Bulletins and Readers

Sunday			
Dublin	1100	7.043	SSB Colm EI3H, Sean EI7CD, Gerry EI8CC, Roland EI4GYB
Wicklow	1130	3.680	SSB (as Gaeilge) Paddy EI7GK, Danny EI6GS
Dublin	1145	145.525	FM
Dublin	1200	3.650	SSB As 1100
Tipperary	2030	145.450	FM Tommy EI7IT, John EI2JB, Andy EI5JF
Dublin	2130	145.525	FM As 1145
Monday			
Cork	2000	145.750	FM Vincent EI7HN
Limerick	2000	145.725	FM Brian EI9AL, Tony EI2AW
Louth	2000	145.675	FM Peter EI4HX, Thos EI2JD
Galway	2000	145.625	FM Aengus EI4ABB, Richard EI5GC
Tuesday			
Waterford	2130	145.650	FM Gareth EI7FZB, Robbie EI8FZB

Contents

<i>Society Officers & Committee Members:</i>	..... 2
<i>Christmas Message from President</i>	..... 3
<i>ATV with Pat EI2HX</i>	..... 4
<i>Your Letters</i>	..... 5
<i>HF Happenings with Dave EI9FBB</i>	..... 6/7
<i>The Brendan Trophies - New awards</i>	..... 8
<i>Dundalk Amateur Radio Society</i>	..... 9
<i>IARUMS with EI4GXB</i>	..... 10
<i>Phoenix RC on the Royal Canal</i>	..... 11
<i>History of IRTS by EI9F (part 1)</i>	..... 12/13/14
<i>Report on IARU Region 1 Conference</i>	..... 16/17
<i>George Francis Fitzgerald</i>	..... 18/19
<i>Mayo Rally in Castlebar</i>	..... 19
<i>Swazi Scouts in JOTA</i>	..... 20
<i>Radio News new deadline</i>	..... 21
<i>80m Counties Contest</i>	..... 21
<i>Webmaster Wanted</i>	..... 21
<i>Radio Blogs</i>	..... 21
<i>IOTA Contest - Final Results</i>	..... 21
<i>Contest Corner with EI2JD</i>	..... 22
<i>HF Beacons 1.8 - 10MHz</i>	..... 23
<i>Emergency Radio by EI5GPB</i>	..... 24/25
<i>Lisburn Rally</i>	..... 25
<i>Radio Frequency plan for EI</i>	..... 25
<i>Echo Ireland download page</i>	..... 25
<i>Contest Calender</i>	..... 26
<i>LoTW by EI9FBB</i>	..... 27
<i>Members Advertisements</i>	..... 28
<i>Coolmine Rally</i>	..... 28
<i>Limerick Rally</i>	..... 28
<i>IRTS Shop</i>	..... 29
<i>Scorpion (Advert)</i>	..... 29
<i>Wescom (Advert)</i>	..... 30
<i>JBT Trading (Advert)</i>	..... 31
<i>South East Communications (Advert)</i>	..... 32

Committee Members 2008/09 Elected

Thos Caffrey, EI2JD
 Sean Donelan, EI4GK
 Ger McNamara, EI4GXB
 Brendan Minish, EI6IZ
 Mark Condon, EI6JK
 Joe Ryan, EI7GY
 John Ronan, EI7IG
 Seamus McCague, EI8BP
 Ger Gervin, EI8CC
 John McCarthy, EI8JA
 Pat O'Connor, EI9HX

Co-Opted

Pat Fitzpatrick EI2HX
 Sean Nolan EI7CD

Christmas Message from the IRTS President

Rev. Finbarr Buckley EI1CS

Another year has passed and what an interesting year it has been for our hobby. It is indeed alive and well.

During the year I was delighted to have had the opportunity to meet with many of you in my journeys throughout three provinces, as well as many of the delegates from 41 countries from Region 1 during my recent trip with Sean EI7CD to Cavtat in Croatia for the Region 1 Conference where we represented the Society. Details of the conference can be found in Sean's report in this issue.



visit it, not only from EI but from all over the world.

During the year we also negotiated with ComReg for the issuing of the 5MHz licences. Through our contacts with the military authorities 25 of these licences were issued on Oct. 17th.

After March 31st next the frequency 7.1 MHz to 7.2 MHz will become an exclusive amateur band throughout Region 1. This demonstrates the importance of the role of IARU in their work on the radio spectrum.

Many things have happened over the year. First of all the Society went west across the Shannon for a very successful AGM in Galway in April after a lapse of some years.

I was delighted also to hear of the start of a new club in Donegal after an absence of some time. We particularly welcome the number of clubs who have affiliated to the Society from Northern Ireland in recent years. This encourages activity from sharing news to contesting and rallies for the benefit of all.

AREN is having continued success in its activities under the direction of John Ronan EI7IG. It is particularly interesting to read of these, and especially where the group took part in exercises with the civil authorities demonstrating our commitment of service to the community.

I hope that some of the other regions will consider getting involved in setting up an AREN group in their areas. It is a great opportunity for group activity as well.

Throughout the year there were the individual achievements such as 1st EI 9 band DXCC by John EI7BA and 1st EI RTTY DXCC by Denis EI6HB as well as the increasing number of EI's appearing in the DXCC listings and on the honour roll. Congratulations to all concerned.

During the year many of you operated in contests, such as IOTA and Lighthouses as well as field days. They are always enjoyable events. It would be nice however if we could have more support for the field days

Recently I had the opportunity on behalf of the Society to sign the contract to renew our agreement with ComReg for the setting, organising and correcting of the experimenters examination both for Morse and theory. This will last for three years. Since the society took over the running of these exams three years ago we have had a pass rate of 62% with 146 candidates taking the examination. I would like to pay a tribute to Sean EI7CD our liaison officer with ComReg and also Sean Donelan EI4GK for the trojan work and time that they put into that task. The demand for classes is growing but there is still a scarcity of teachers

Our membership now stands at 977 which the highest it has been for some years. Our web page has had an increase in traffic from a total of 7,582 in Oct. 2006 to a total of 40,757 in Oct 2008. It is a credit to Joe EI7GY for the work he does and for such a valuable asset our web page has become for those who

Next spring we hope to be involved with the Institute of Engineers in a project to promote the hobby of radio communications at their HQ in Dublin and hopefully at other centres around the country later. This planned activity was the result of a contact by our vice president Paul EI2CA with the Institute. This will be an opportunity to demonstrate our hobby as educational and self-training as well as interesting.

Next June we also hope to have once again a stand at Friedrichshafen for the European Rally which has been such a great success over the past two years. Having the stand there gives us a presence among the other societies in Europe. We were able to publicise Ireland as a tourist venue with the help of literature Failte Ireland sent us. I am sure that next year will be another successful year.

I would like on your behalf to particularly thank our officers and committee for the tremendous work that they do. When I first joined the committee I was very impressed by what I experienced. I have found over the years that new comers end up themselves by becoming part of a very committed group.

Most of the work is done behind the scenes, whether it involves the QSL bureau, or production or distribution of Echo Ireland, or setting up and running our stand at rallies, or membership, or contests or EMC or monitoring the bands etc.

It is all done voluntarily.

During last year in my travels around the country I made it my main concern to let you know what your society does for you, and that we appreciate your membership.

We need your support if we are to continue to deliver the service that our members deserve.

We have to negotiate with our regulator ComReg where issues concerning licensing are dealt with. We endeavour to achieve what we can to enable us to enjoy the privileges that other amateurs throughout Europe enjoy. We are grateful for the issuing of the 5MHz licences and hope that those of you who were granted them are enjoying this new band.

Finally may I wish you and your families a happy and blessed Christmas. Nollag shona agus gach dea ghui san ath bhliain

Finbarr EI1CS



Excerpt from the HX files

A Look at ATV with Pat Fitzpatrick EI2HX

Excerpt 002 - My First Projects.

1.2 GHz

My first 1.2GHz project was to house the transmitter and receiver as they come as just the bare bones boards.

The box I used for the transceiver came from Maplin, Cat no. 1FO8J. I bought the entry level type and the one for the receiver I had in stock. It is a die-cast Eddystone type and these are available from Maplins also, Cat no. N93BQ.

These would be classed as prototypes and I could get away with murder if I was asked to show them.

As you can see by picture-1 there was not a lot of room for error in the size of box for the transceiver.

When I started to mark out the box I knew I would not have much room and while talking to Tony EI4DIB I went over to his home and we got a piece of cardboard and cut it down to A4 size. We cut some holes in it so the phono sockets and power sockets came through and then placed it on his printer/scanner and scanned it and then I had a template for marking my boxes. I repeated the process for the Rx board as it is bigger than the Tx board.

The boxes are made from aluminium and so are not hard to drill and to file out to the correct size if you do not have the right size drill bit, but be careful because a good file can chew the metal fairly quickly.

As you may have noticed I did not make a hole in the top of the box so that I could adjust the dip switches.

This was not needed as for the occasional time I would need to change frequency I could easily remove the lid to adjust the Tx or Rx frequency.

On another 1.2GHz project I used waterproof plastic boxes for portable use as I had a few close calls with the metal ones in the rain. I did buy some waterproof metal boxes from Maplins and at some of the rally's over time. As with some things in life you never get the size you want, just buy them, as you never know when you will need them.

As a wise man once said "it is better to be looking at them than looking for them."

10 GHz.

My first 10 GHz Tx was made for me by the late Dermot EI2AK.

It consisted of a Solfen head from an old electronic door sensor, and a Gunn modulator board. They were housed in the case of the door sensor. Connectors were put on the back of the unit for dc and av.

I went portable with Dermot and we did some experiments with mark EI9FX receiving our signals.



50mw Tx

At a rally in England I was introduced to Bob Platts G8ZDP and Stewart Marshal G0ABC by Michael EI5GG.

Money changed hands and I came away from their stall with parts for a 10 GHz Rx and Tx, horn aerials, relays, transitions and severely malnourished pockets.

Also purchased at the same rally was a parabolic dish for 10 GHz and some more project boxes.

In picture 2 you can see how I placed the modulator board and Solfen head in the metal box and the DC and AV connectors and how I connected it to the dish.

The dish support was made for me by Mark and the penny feed by Michael.

I now had my 10 GHz dish for transmitting, my modded LNB for receiving and with a 12 volt powered satellite receiver purchased surprise, surprise, not from Maplins but Lidl.

I was then told about a circulator, also in picture 2, and how that could be connected to the dish first and then the LNB and Tx connected to it and I would have a tidy setup and I could always house it in a box (another excuse to buy one).

I purchased a tripod a while ago and my plan is to mount the 10 GHz Rx/Tx unit on it. I will have some photographs of that in the next issue of Echo Ireland.



10 GHz Dish

Cameras

Cameras come in all sizes, and my first one was a Sony camcorder and it still is my main shack camera. Others I have bought were old security cameras at rallies, car boot sales and Maplins.

Most of the cameras I bought use 12 volts, and they are great for portable use. I have bought black and white cameras as well as some infrared ones. Some have sound but Maplins have a small audio module that works off 12 volts (cat no, KJ44X) and the people that have heard the audio say that it is as good as the Sony camcorder I use. As one of the infrared cameras is waterproof I placed it beside my aerial and it gives a great view of where the aerial is pointing and something else for the receive station to look at even if you think you are a lookalike for Mr. or Mrs. Pitt.

I also bought a couple of pan and tilt units for my cameras. These also work off 12 volts and can be great fun when you are showing off your shack for nice steady shots. One of the pan and tilt units was for an outdoor camera and worked off 12 volts and as a result of that I bring that out portable with me where I bolt it to the roof rack on my car, or on something higher.

This would depend on the lengths of the DC and AV cables but more importantly for safety sake as you do not want to cause any harm to yourself or to any visitors or members of the public who just happen to walk by.

As those who have set up /p have found out, as well as attracting DX, aerials can lure people so be careful.

Thanks to the photo studio of ei-2-jd for taking the pictures for me.

In the next Echo Ireland: 10 GHz dish, and some fittings.

I wish you and your family a happy Christmas and a prosperous New Year.

Pat EI2HX

Your Letters.....

Reaction to Paul EI5DI's Acceptance Speech.

Dear Editor,

Firstly I would to congratulate Paul EI5DI on his well deserved honour.

On Dalkey Island using the call EJ1000, I watched Paul in action. Operating from the bowels of the Tower, suspended on two planks, he worked a pile-up of JA's at the rate of 3 plus a minute for a considerable time.

He mentions AI G3FXB's preference for hand logging.

Some years ago at one of our pre contest meetings Paul suggested computer logging. Most of us had not heard of it.

Our captain and senior operator suggested we give it a test there and then.

He tried to simulate a pile-up calling QSL EI----- 59 -100.

After about 10 minutes it became clear the logger was falling behind. I have always believed that an operator using computer logging himself the QSO hourly rate is dependant on how quick he can type and not his operating.

In fact were he to have an experienced person using the keyboard and listing to the reports being given, I think the hourly QSO rate could improve by as much 10%.

Checking for multipliers is a very different matter. Some years ago having thought we had won SSB Field Day, we were subsequently disqualified for having too many hand dupes.

Paul should remember one year in the IOTA contest from Bere Island we used a listening receiver to hunt down multipliers, bringing slips of paper to the operator to enable him to log the station. One way to stop this practice would be to impose a 10 minute stay on the band being used. After many contests with some reasonable results, we learned how the big boys were doing it. Using FT 1000 or similar rigs they could be on two bands, different modes at the same time. Their computer could log both giving correct serial numbers.

We never managed to crack it. Paul should realize there are many Hams myself included, who for one reason or another cannot put up antennas.

Having earned our cherished ticket, made friends all over the world, spent hours chasing that rare DX station, Rag chewing etc. Does he expect us to now pull out the plug after all the years of fun. Perhaps CQ100, Echo link, and others do not provide the challenge of Long/Short path propagation 10 minute dawn and dusk window on the 40 meter band.

Last week on CQ100 I worked YI1KHT in Bagdad due to no power he was using a very old genie. Is this not the true spirit of what Amateur Radio is about. He sent me a card dated 1928 confirming a QSO between YI1LM and G6YL.

Suggest look up HAMGALLERY.COM/TRIBUTE/G6YL.

Our hobby has always been very diverse CW,SSB VHF Moon bounce, 4 & 6 Meters Packet, DXing, IOTA Contests etc, plus many many more.

Lets encourage and welcome all new hams into the hobby and for us older operators give advice and help if asked for or needed. Everyone to their own.

Best 73 de

Tony EI6EW.

Tel: +353 (1) 2750341 Mob +353 (87) 2545199

P.S. At the 1996 IARU Region 1 Conference were all Region 1 wrong and IRTS correct?

Dear Editor,

Many thanks for another fine issue of Echo Ireland.

Several items caught my attention this edition, including the formation of a new club, EI7BA's nine band DXCC (congrats John), EI9E/P (some serious hardware there) amongst others. However the article that most interested me was Paul O'Kane's speech on reception of the AI Slater Memorial Award (congrats to Paul).

On the first reading, I was annoyed, on the second I was less so, as Paul has some valid points. On subsequent readings, I found myself reluctantly agreeing with Paul's core message. I say reluctantly agreeing, because all of my professional training has been in Information Technology, almost exclusively in the area of digital communications and how to use various methods to enable computers to talk.

Naturally now, I'm a fan of all digital modes, especially when used for emergency communications purposes.

Much to my surprise I find myself agreeing with Paul.

Sure, we can do lots of clever things with the various modes available to us that can perform a useful function, digitise our voice and send it over the internet to someone, send an e-mail to someone via an amateur satellite, use soundcard based digital modes to 'work' that rare station, utilise APRS for tactical awareness of the location of various AREN operators in the field, but these are not core to our hobby.

For the hobby to survive, we must emphasise the differences between our hobby and the Internet, to this end, we must look at the roots of the hobby which is, of course, going back to the days of the wireless telegraph.

Thank you Paul for reminding me of this fundamental tenet of our hobby.

73

de John, EI7IG

John Ronan <jronan@tssg.org>, +353-51-302938

Telecommunications Software & Systems Group,
<http://www.tssg.org>

Seasons Greetings from the Editor

Sincere thanks to all who make Echo Ireland happen, especially those who contribute on a regular basis.

A special, thanks to Sean EI4GK and Joe EI7GY who organise the distribution both by mail and via the internet.

Best wishes to you and yours for the Christmas season and may 2009 be a successful and healthy year for all.

When making your new year resolutions, please include a resolve to contribute to Echo Ireland. Even criticism is welcome!
Dave EI4BZ

SWL News Report

The Radio News Team would like to acknowledge an SWL report on the 80 metre news broadcast from Alan EI1571 in Wexford.



HF Happenings

with Dave Deane EI9FBB

Apologies in advance for this briefer and shorter than usual issue of HF Happenings.

As usual, there are the usual daily band openings, but despite this, these openings are 'shorter' and 'briefer' than they have been in recent months, resulting in most of the higher HF bands, i.e. 20m – 10m now being closed shortly after sun set. As a result of this, the majority of EU stations have now moved down to the lower bands, i.e. 30m and below causing some rather crowded band conditions at times.

One station witnessed over this past weekend was a genuine '5/9 +55dB' and by having signals like this, can quite easily 'swamp' out any DX that may be lingering. Certainly makes things that bit more challenging for the moment!

Santa Claus Land

Keeping with the festivities, OH9SCL will again be on this year in December from the Arctic Circle, "Santa Claus Land." Operated by "Santa's helpers," OH3BHL, OH8GZN, OH8KVV, OH9KL, OH9MDV, OH9MM and OH9RJ, OH9SCL will be on 160-10m CW, SSB and digital. QSL via OH9UV. The log will also go on LoTW.

200th birthday of Louis Braille

Another special call issued is GB2HLB and this will be a special call from the U. K. December 26-January 22 to mark the birthday of Louis Braille 200 years ago. He invented the system for blind people to read by feeling bumps on paper. Every QSO will get a QSL with Braille's picture on it. There is a fundraising campaign for charity associated with it. For more on that go to <http://www.justgiving.com/louisbraille>.

World Rally Championship

Special call TM5WRC will be QRV to commemorate the 5th running of the French crew Sebastien Loeb and Daniel Elena in this year's World Rally Championship. Activity will be on HF and VHF on all modes. Operators will be F0EWK, F1PUX, F1RUK, F4ELU, F5NZO, F5RZJ, F6EZF and F8DVD. More details can be found at <http://f4elu.free.fr/tm5wrc/index.html>. QSL via F4ELU.

Netherland Antilles

Apparently there is some old news traveling around the reflectors and one of the DX rags as to the status of the Netherland Islands. As a reminder, the status change of the Netherland Antilles, which was scheduled to take place on December 15, 2008, has been pushed back again. No definite date has been scheduled but it is believed likely at this point that Curacao and St. Maarten will achieve their desired status change before January 1, 2010. Complete details can be found at <http://tinyurl.com/3wtbsh>.

Ascension Island

Members of the Cambridge University Wireless Society (G6UW) plan to operate as ZD8UW from Ascension Island between December 31, 2008 and January 9, 2009. Team members include M0HSW, Hugo; M0TJH, Tom; G4EAG, Simon; G7VJR, Michael; G3USR, Gordon; and G3ZAY, Martin. Look for them on CW and SSB on the HF bands. They plan to upload their logs to LOTW after the DXpedition. QSL via G7VJR.

Afghanistan

DL4ST, Stefan, is now on a work assignment in Kabul, Afghanistan until March 2009. He has been issued the call T6AC and can be found QRV after 1400Z until 1930Z in his spare time (Saturday- Thursday). Stefan says conditions are a little difficult as he gets interference from the local military communications. He has been on 20 and 40 meters on SSB, CW and PSK31. His IC-7000 runs 100 watts into a simple multi-band vertical. QSL via DL4ST.

Swiss Prefixes

In celebration of the Union Schweizerischer Kurzwellen-Amateure's (USKA), Switzerland's national Amateur Radio society, who celebrates its 80th anniversary, ops from Switzerland can use special prefixes HE8 and HB8 during the entire 2009 year. HB9 stations can use the HE8 prefix, while HB3 stations can use HB8. The special prefixes can only be used from the Swiss territory and may not be used by visiting stations signing home-call/HE8 or /HB8.

Senegal

During the second half of January DL2RMC, Tom, will be doing a DXpedition to Senegal. He'll be QRV as either 6W/DL2RMC or with a special 6V call from January 16th to 29th, including the CQ World Wide 160 Meter CW Contest. QSL via DL1RTL.

Palestine

The E44M team heading to Palestine will be a six man Italian team. They will be IK2CIO, IZ0BTV, IZ0EGM, IZ4AKS, IZ4DPV and IZ8IYX.

The team has the license and will be QRV from January 1st to 11th, 2009. Activity is expected on 1.8 through 144 MHz on SSB, CW, RTTY and all digital modes with a KW.

Equipment will include three stations with beams, verticals and wire antennas. The E44M team will put an emphasis on RTTY, the digital modes, the low bands and 12, 17 and 30 meters, with special attention to those outside Europe, when conditions allow.

The pilot stations for this DXpedition are expected to be announced before the operation. More news is expected in the next couple of weeks. Keep an eye on the E44M Website at www.dxcoffee.com/e44m. QSL via IZ0BTV.

KP5 Desecheo Island

The U.S. Fish and Wildlife Service has given dates for the 2009 Desecheo Island, KP5, operation. It is February 12-26, 2009. A small reconnaissance party will go on December 19th to make sure the operational area is safe - clear of unexploded ordinance (UXO) and "other hazards." There will be no radio operations, though three of the ham team members will be along with some government personnel, including an explosives expert who will make sure their planned site is clear of bombs. In its past, the island was used for military target practice.

As for the actual operation, the 15-operator team will assemble on Puerto Rico's main island February 8th for "mandatory UXO training" for three days. They will also organize their several tons of equipment. Landing begins February 12th and two stations will go on the air

(Continued on page 7)

(Continued from page 6)

right away. On the back end of the operation, a station or two will be on right up until departure time, as the rest of the stations are taken down. Halfway through the operation, on February 19th, half the team will leave and a new group will arrive to take over for the last week.

The group is planning antennas and propagation charts with the hope of maximizing the QSOs to Asia, where Desecheo is the number two on the most needed list, and to Europe, where it is number three.

Organizers W0GJ and K4UEE are looking for contributions. You can get info on that on their web site, <http://www.kp5.us>.

Lord Howe Island

VK9LA, Lord Howe Island, is in the works for March 24th to April third, 2009. This will be a sizable operation with operators K5YY, SQ8X, SQ8DIE, SV2KBS, VK3QB, VK4IO, VK4VCH, VK5CP, VK5PO, VU3RSB, VK4FW and at least one more operator is expected. They will be on 160-6m SSB, CW and RTTY including the CQ WPX SSB Contest.

They plan six stations on the air simultaneously, with three-element mono-band Yagis, verticals and wires from tall pine trees, on their two-acre site.

The operation needs financial support. They have an online system that accepts PayPal. They have a Web page at www.odxg.org/vk9la.htm.

Aves Island

Members of the 4M5DX Group from Venezuela are planning a DXpedition to Aves Island in the February to March 2009 time frame. The exact dates and full team roster is expected to be announced soon.

They will be using the call YW0A. IT9DAA will be the QSL manager. The following are suggested frequencies: SSB: - 1845, 3755, 3790, 7055, 14195, 14260, 18128, 18145, 21260, 21295, 24950, 28460, 28495, 28560 and 50110. CW: - 1830, 3530, 7025, 10115, 14040, 18098, 21040, 24920, 28040 and 50110. RTTY: - 7040, 10140, 14090, 18100, 21080, 24920, 28090 and 50110

Santa Maria Island, Chile, SA-070

The "3 Stars DX Group" will activate Santa Maria Island, Chile, SA-070, with

the XR5L callsign. This will be January 28-February 4.

Along for the fun will be F6DXE, F0ELI, F0ELK, LU1EJ, XQ7UP, CE3HDI, CE6AMN, CE6UFF and CA6UTF.

They plan to be on 80, 40, 20, 15 and 10 CW and SSB.

QSL via CE6AMN, direct only.

<http://www.3stardxgroup.cl>.

Bangladesh

Exciting news from Bangladesh says we will soon be hearing more S21 stations QRV. Bangladesh Telecommunication Regulatory Commission (BTRC) administered Amateur Radio exams to 84 people of which 62 passed!

You can read the full details at <http://forums.qrz.com/showthread.php?t=184529>.

Rockall



Andy Strangeway, the "Island Man", is planning a trip to Rockall Island (EU-189) in 2009.

Andy is fully aware of the demand and interest shown in Rockall by the Amateur community and is keen to hear from any that may have a positive influence on this anticipated trip.

Keep a watch on Andy's Web page at <http://islandmanrockallexpedition2009.com/latest-news/>

Papua New Guinea

P29NI was QRV lately operating from 2 of Paupa New Guinea's IOTAs. Al, AD6E - Derek, G3KHZ - Mike, K6MYC - Skip, W5GAI operated from Garove Island, Witu Group, OC-181, between 20th to 24th October and then they moved on to Hermits Island, Ninigo group, OC-041, operating from 29th October to 2nd November 2008.

Here is the list of the following EI's that made it through.

(P29NI OC-041) 20 CW EI3IO
(P29NI OC-041) 20 CW EI5CRL
(P29NI OC-041) 20 CW EI6FR
(P29NI OC-041) 20 CW EI7BA
(P29NI OC-041) 30 CW EI7BA
(P29NI OC-041) 20 CW EI9FBB

(P29NI OC-041) 40 CW EI9JF
(P29NI OC-181) 20 CW EI3IO

QSLs for the OC-041 operation go to G3KHZ and cards for OC-181 go to SM6CVX for this operation.

That's about all for this issue folks, it's unfortunate that we as a community depend and rely on these large multi-national DXpeditions that we have become so accustomed to.

Without having several of these at our disposal, the bands seem that bit 'empty' or simply 'lacking grace' without them. As you can see from the above listings, the majority do continually seek funding or contributions and it is important that perhaps an extra 'dollar' or so could be sent in addition along with one's direct QSL request.

Without support, a vast amount of recent operations would not have taken place. A lot of these operations can easily be taken for granted and it is sometimes even easier to forget about the expense involved in giving us a few 'new band/mode slots'.

It now seems normal practise to include €2 or 2 IRCs to cover the direct return of a QSL card.

One IOTA operation I heard about recently cost around \$50,000 but due to dangerous circumstances, (wild bears) the team only managed about 2,000 QSOs. For this particular team to break even, each QSL card would have to include a donation of \$25.00!!

As the operators themselves cover a vast amount of the required funding, it is the equipment and logistics that require that little bit extra, as these costs have inflated rapidly as of late.

A big 'Hats Off' to all the DXpedition teams from this past year.

Special thanks to Bernie, W3UR, for allowing us to reproduce and extract information from the pages of 'The Daily DX' to make this feature happen and of course to Nicky EI9JF, Declan EI9FVB, Charlie GI4FUE, Eoin EI9O, John EI9JO and John EI7IG who have all been important contributors to this 'HF Happenings' feature.

Thanks for your support and looking forward to your contributions again in 2009.

Best seasons greetings to all and good DX

73 de EI9FBB

The Brendan Awards

Trans-Atlantic Challenge on VHF

The Atlantic has always been an inspiring challenge to men. To be the "First" to cross this ocean, by whatever means, is a goal which has stretched the imagination and ingenuity of many and rewarded the dedication and determination of a few.

One "First" still waiting to be claimed, however, is that of bridging the great ocean using very high frequency (VHF) signals, specifically using the amateur allocation at 144-146 MHz (2m).

Since the Atlantic was first bridged by radio using high-frequency signals in November 1923, amateur radio operators regularly cross the ocean with signals using differing communications systems and frequencies and various methods of radio-wave propagation.

For at least five decades, operators have tried for that elusive "First", but while there have been a number of reports of signals which may have originated on the "Far Side", the elusive two-way contact has not been made.

To encourage operators to persevere in the quest for this "First", the Irish Radio Transmitters Society (IRTS) announced in 1995 that they would award a pair of Challenge Trophies to the first amateur stations to establish two way communications across the Atlantic on the 144MHz band.

The Trophies, two inscribed cut glass vases, have been kindly presented by Waterford Crystal and are known as the "Brendan Trophies".

Brendan the Navigator was a 5th century explorer whose exploits are well documented in early Irish and Scottish literature.

Brendan and his monks certainly left Ireland and are known to have reached Iceland and probably Greenland, while some accounts mention "a further place", possibly present day Nova Scotia or Newfoundland.

Since launched in 1995, the "Brendan Trophies" have inspired a number of beacons for propagation studies, expeditions and trials.

In the intervening years, however, new technologies have been developed and digital and automatic transmission modes are now available in addition to traditional voice and Morse (C.W.). Since the mid-nineties, there has been a discernible decline in VHF activity and interest in the North Atlantic path has also waned. Recognising the overall difficulty of the task and the need to actively support and encourage those groups and individuals who continue to work on the challenge with great energy and enthusiasm, IRTS has decided to broaden the original challenge into the Brendan Awards.

New Awards

While the "Brendan Trophies" will continue to be the premier award for the first two-way contact across the Atlantic using the conventional method referred to above, there will now be three additional awards.

Brendan Shields and Plate

A pair of "Brendan Shields" will be awarded for the first two-way digital/automatic mode trans-Atlantic contact and the "Brendan Plate" will be awarded for the first verified reception of a trans-Atlantic signal.

Brendan Medal

In addition, the "Brendan Medal", a triennial Silver Medal, will be awarded to the group or individual who, in the opinion of the Awarding Committee, has contributed most to the promotion of propagation studies on the North Atlantic 2m path through, for example, the establishment of permanent beacons, expeditions or web facilities for data collection and analysis.

Nominations for the "Brendan Medal" will be sought through the international amateur radio press every three years,

commencing in spring 2009.

A full set of the detailed rules is available on the IRTS website www.irts.ie

The Brendan Awards are designed to give new impetus to the challenge of the Atlantic at VHF, to rekindle the spirit of experimentation which drove those early enthusiasts in the new science of Radio and to encourage dedicated expeditions, breathtaking antennas or serious propagation studies in an attempt to claim that elusive "First"!

Paul Martin EI2CA

Engineered... A Week of Wonder!!

Engineers Ireland will host a "week of wonder" for Primary and Post Primary students in February 2009.

IRTS in collaboration with Engineers Ireland will run a number of workshops at Engineers Ireland's Dublin headquarters. These will consist of a two-hour, hands on, programme which will act as an introduction to communications and radio technology.

The Society also intends to package the programme so that clubs around the country will be able to run similar workshops.

We have already approached a number of clubs and they have indicated their willingness to participate by running one or more workshops in their area.

Engineers Ireland will provide clubs with local partners such as technical schools or libraries who are anxious to participate.

The Society would urge clubs to commit to becoming involved as soon as possible. There are obvious benefits for all involved.

With the programme packs provided by the Society, clubs would need three or four personnel to run the workshop.

If your club or group are interested in helping out, contact Paul EI2CA on 087 2523908 or by email to paul@comma.ie

Dundalk Amateur Radio Society

The Dundalk Amateur Radio Society (DARS) meets on the first Wednesday of every month from 2000 to 2200 at its premises on the Castletown Road, Dundalk.

The club runs a 2m repeater on 145.675MHz which is located just north of Dundalk on the top of Claremont Cairn. At the moment the call sign is EI7DAR but with ComReg updating the rules and regulations on repeaters this is likely to change soon.

Members of the club hail from EI and GI with interests including rag chewing, contesting and Amateur TV (ATV).

Two members of the club are on the IRTS committee, Pat Fitzpatrick EI2HX is the incoming QSL manager and Thos Caffrey EI2JD is the Contest Manager.

Co-Operation Ireland Bike Ride 25

DARS linked up with Raynet the Northern Ireland Amateur Radio Emergency Network in June to assist with the radio communications for the "Co-Operation Ireland Bike Ride 25". On the evening of Friday 23rd June we met at the "Dundalk Institute of Technology" and setup a 2m and 70cms base station which was to be the headquarters station with EI0W as the call sign.

On Saturday 24th and Sunday 25th we manned the HQ station and had fixed and roving mobiles setup at strategic points around the course, which ran as far as Rathfriland through Newry in the North of Ireland to Carlingford, Castlebellingham, Ardee, Carrickmacross and back to Dundalk in the South.

IARU HF Championship

In July Thos EI2JD was nominated to run the IRTS HQ station in the IARU HQ Contest.

He did the 24 hour contest from his own QTH in Clogherhead using the IRTS callsign EI0HQ making 1,464 QSO's with 200 multipliers.

Media Hits

This appeared as a news item in both the Drogheda Independent and the Dundalk Democrat newspapers.

Following on from that a local commercial radio station "Dundalk FM" interviewed Thos EI2JD, Pat EI2HX and Jim MI3SBI about the history of the club.

This was a great way to advertise the club and its activities to locals around Dundalk.

IRTS Presidents Visit

In late August Fr Finbarr EI1CS paid a visit to Thos in Clogherhead and while chatting and sorting out all the problems of the world, a visit to the Dundalk club was organised for Monday 1st November.

This was to be the first visit of a sitting President of the IRTS to the "Dundalk Amateur Radio Society". For the occasion we asked Peter EI4HX to read the IRTS 2m news from the clubhouse at 20:00.

At the end of the news the President gave a little talk on air to the listeners where he reminded all that it was 27 years since his last time in Dundalk and that he was a past member of the Dundalk club.

Later he addressed the members of the club filling them in with information about the running of the IRTS.

We were able to tell him about the upcoming launch of the new DARS website.



EI7DAR members at the Co-Operation Ireland Bike Ride

New EI7DAR website.

www.ei7dar.com

We have recently put up a new website for the club, thanks to our techie Richard MI3CQR. Here you can find info on the club, its members and activities. There is a photo gallery and a video gallery where you can find clips of the Bike Ride 25 and of the visit of the President of the IRTS.

EI7DAR Repeater on the internet

Check out the "Listen Live" section on the website. Here you can listen live to the Dundalk 2m repeater. If you are outside the footprint of the 2m repeater or indeed the other side of the world you can now listen to the IRTS news "Live" every Monday night at 20:00z.

Please sign our guest book and leave your remarks.

Special Events

Another part of the hobby the members are interested in is "Contesting" and "Special Events".

Over the past years the club has activated EI6DD, EI1OOM (100 years of Marconi's experiments on Rathlin Island), EI1OOL (100 years of the Clogherhead Lifeboat), EI0DMF (Dundalk May Time Festival), EI25YL (Latvia joining the EU), EI75IRTS (IRTS 75th Anniversary) and EI0HQ the IRTS HQ Station.

Our recently acquired Contest Call "EI0W" can be heard in ALL the big contests during the year, both CW and SSB.

The station is setup at the QTH of Thos EI2JD where he and Oleg EI2JK and other members are experimenting and building every week with different antennae and portable masts.

Do give us a call in the next contest.

Visiting operators to the station include Slavek OK1TN/EI7JW, Jan OK1NU, Charlie GI4FUE, Stan EI6DX and Mark EI6JK.

Also recently for the CQWW CW contest we welcomed Chris LX1KC/EI2JQ to the station.

Amateur Television

On the ATV front Pat EI2HX, Michael EI5GG and Mark EI9FX are active on 1.2 and 10GHz. See Pat's page on ATV in this issue.

We would like to wish you all a very Merry Christmas and a Happy New Year.

You will always be very welcome at our meetings on the second Wednesday each month at Castletown Road, Dundalk



International Amateur Radio Union Monitoring System with Ger McNamara EI4GXB

The following minutes of the IARU Region 1 monitoring service working group meeting at Cavtat will give you an idea of what's happening around the region.

Minutes

The Chairman DK2OM reported on the WG activities and highlighted the following

• Voice transmissions

Spanish fishermen were operating in all bands with USB-transmissions, occasionally using vocoder equipment. Moroccan fishermen were operating in all bands with USB-transmissions.

Many voice traffic was reported coming from Africa by missionaries, military, NGO's, fishermen and private companies.

UNIFIL communications on 14055 kHz (near Lebanon) were stopped in September 2008.

• Digital traffic

military broadband systems using multi channel PSK were reported coming from RUS, UKR, BLR and NATO.

Embassy traffic from MFA Cairo on 14046.6 kHz in Sitor A (semi duplex) and Codan 9001 with embassy in Pyongyang (KRE). A complaint from the German PTT has been filed.

North Korean diplomatic traffic on 14 MHz (various frequencies) using DPRK-FSK 600 often with the KRE embassy in Tripoli Libya was stopped.

Carabinieri traffic on 7000 kHz in ALE (MIL-188-141A) was stopped with assistance of ARI.

- **Over the Horizon Radar** transmissions on Cyprus with 25 pps and 50 pps in the 21, 14, 10 and even 7 MHz were reported. The meeting felt it is not possible to stop these transmissions

- **Codar HF Oceanographic radar** from Naples. Interference was reported during the sporadic E season. After complaints from German PTT and ARI these transmissions stopped.

- **Channel markers** on 7038-7039 kHz from Russia and Ukraine (A1A-CW military service). Complaints from the German PTT were not taken into account.

- **Russian airforce** (ident REA4) on 7018 and 7044 kHz (7018 Moscow and 7044 Omsk). Several complaints were raised by German and other European PTTs were not observed.

- **Intruders from Region 3** that were audible in Europe were reported in the IARU MS Region 1 monthly newsletter. The cooperation with Regions 2 and 3 is very good.

The following Member societies contribute to the work of the IARU Region 1 MS:

Austria, Finland, Germany, Great Britain, Hungary, Ireland, Italy, Kenya, Lebanon, Malta, Netherlands, Portugal, South Africa, Spain and Switzerland.

More and detailed information can be found at

<http://www.iarums-r1.org/>

IARU Secretary K1ZZ complimented the Region 1 Monitoring System on their excellent work. He informed the WG that from 29 March 2009 the frequency range 7100-7200 kHz is no longer available to the broadcasting service.

Although it is expected that most broadcasting stations will

move to a frequency outside 7100-7200 kHz some broadcasting stations will continue to transmit in the then exclusive 40 meter amateur band.

To encourage compliance by broadcasters K1ZZ suggests a "soft" approach initially, this to allow an evaluation after six months.

ERC Chairman PB2T suggests that IARU MS add to their work program to monitor broadcasting activity in the segment 7100-7200 kHz starting 29 March 2009 and to report these transmissions on the IARU Region MS website.

The IARU Region 1 ERC will work on a report to HFCC and ECC WGFM. This proposal was accepted.

WRC-2011 Agenda Item 1.15 deals with possible allocations in the range 3-50 MHz to the radiolocation service for oceanographic radar applications.

IARU objective is to convince WRC-11 to avoid amateur bands. It is important to document interference reports through our IARU MS working group as has been done for the Codar Radar from Naples.

The working group nominates Wolf Hadel DK2OM as Chairman and elected Uli Bihlmayer DJ9KR as vice Chairman.

Recommendation

In order to allow an evaluation of the compliance of the broadcasting service with the change of the radio regulations that starting 29 March 2009 the frequency range 7100-7200 kHz is no longer available to the broadcasting service, the IARU Region 1 MS add to their work program to monitor broadcasting activity in the segment 7100-7200 kHz and to report these transmissions on the IARU Region MS website starting 29 March 2009.

Recommendation

that IARU Region 1 MS add to their work program to document interference reports of oceanographic radar applications in amateur bands in the range 3-50 MHz.

IRTS is committed to participation in the International Amateur Radio Union Monitoring System and reports from members are essential to protect our bands.

Reports from licensed experimenters and SWL's are most welcome and can be sent to Ger McNamara EI4GXB at QTHR or ei4gxb@gmail.com.

The format for submitting reports was carried in a recent edition of Echo Ireland. If in doubt, please enquire.

Finally, that wraps up the IARUMS reports for 2008 and I am very encouraged by the reports received from IRTS members and I would like to personally wish all our members a very Happy Christmas and Prosperous 2009, and also wish that Santa brings you a few surprises for the shack! some sunspot activity would also help HI!

Again 73's to all and thank you for your continued support.

Ger McNamara
EI4GXB

Phoenix Radio Club on the Royal Canal

Members of Phoenix Radio Club had a very successful outing recently when they chartered a 45 foot long barge for a day trip on the Royal Canal from the 12th lock to Leixlip. The 10 foot wide barge provided a very good ground plane for an MFJ mobile whip for 20 metres and a 5/8th whip on 2 metres. An Icom 706 running was used on HF and station operators Dan EI3AE, Tom EI2AJ and Paddy EI1DG made many CW QSO's with stations all over Europe with good signal reports. VHF operation produced only one contact with Mike EI2DJ. The boat was organised and skippered by Stephen EI9AMB.



L. to R.:Greg, Tom EI2AJ, Terry EI8Z, Steve EI9AMB, Paddy EI1DG, Tony EI7CI, Dan EI3AE, Martin EI4DE, Derek (owner)



Stephen EI9AMB



Dan EI3AE and Tom EI2AJ in the EI2PAR/m shack.



Terry EI8Z

Experimental Radio in EI - Part 1

The text of a presentation given by Bill McIlwaine EI9F

This history of radio in EI is taken from the text of a presentation by the late Bill McIlwaine EI9F and will be published in four parts.

Any corrections or additions to the information given would be greatly appreciated. Old pictures would also be appreciated.

On your programmes, the title of this talk is shown as "history of Amateur Radio in EI", but I do not think that I am the best-qualified person to present a complete History. There are others in the Society who have more complete records at their disposal than I have. Let us say that I will endeavour, to the best of my ability to give a talk on my experiences, and those of others of which I have knowledge, backed up by some material supplied by a few of those who were in at the start of things, and to whom I am indebted. My own written records are few, and these few, have to be supplemented by my now not-so-reliable memory. Perhaps these notes will encourage somebody to write up a definitive history before all records are lost, and if so, I should feel well rewarded for putting these pieces together.

Col. M. Dennis

One must bear in mind that Amateur Radio in this country made its appearance along with the pioneers of the hobby elsewhere, largely due to the work of the late Col. M. Dennis, who, when our story starts was serving as Lieutenant at the Royal Arsenal, Woolwich.

Those of you who have read "World at their Fingertips" by the late John Clarricoats G6GL will know that Col. Dennis (as he later became) having attended a lecture in the R.D.S. by Marconi in Dublin in the closing years of last century, commenced experimenting at home in Baltinglass, Co. Wicklow. These experiments led to his constructing equipment for transmission and reception, and to his claiming to be the first non-professional experimental station to be established in the world, a claim which according to Clarricoats – was never challenged.

The year was 1898 and we are fortunate in having here a photograph of this historic piece of gear. Unfortunately the whereabouts of the equipment itself is not known. Col. Dennis was a machinist of a

very high order, as can be seen by the photograph and we have a bug key here, made by him in 1934, also an example of careful construction.

Obviously, therefore, if anyone were to consider gathering any material of Irish radio interest, whether for the purpose of listing it, creating a museum or writing a paper on the subject, the logical place to start was Baltinglass.

In 1967 a visit by a number of the older members of the Society was arranged by Mr P. Dennis, the colonel's grandson and Bryan Fogarty EI6X the then Secretary. Unfortunately this had to be cancelled owing to the outbreak of the foot and mouth disease in England.

When negotiations were re-opened, a couple of years later, it was found necessary to reduce our original party of six to two, as Mr. Dennis felt that as there was practically none of the old gear remaining it was a pity to bring people down on a fruitless visit. Furthermore, he was in the process of demolishing that part of the house containing the original shack. However, we succeeded in convincing him that what might appear to be rubbish in his eyes might be of value to us.

A visit was therefore arranged for Sunday 9th November 1969 and was duly made by Messrs. Purcell EI6D and McIlwaine EI9F. To suit Mr. Dennis, who had an appointment, it had to be an early visit, starting at 2.p.m.

First of all, the shack, or what remained of it, was inspected, and the multitudinous holes in the window sashes were noted – things not having apparently changed much in respect over the intervening years. An interior photograph was not feasible for many reasons, but Leo 6D got in an exterior shot of the window before the wall was pulled down.

A couple of basement rooms got attention next and in one was found what was obviously a Marconi Multiple Tuner, so well known to sea – going operators in the early days. One peculiar feature was that this model bore no manufacturer's name or serial number and left an impression that this was perhaps the prototype unit, particularly as this piece of equipment was developed by a Mr Franklin, a

contemporary of Col. Dennis and probably the same Mr. Franklin later associated with the Marconi Company.

A little research into the history of this beautifully made unit might be rewarding. It was photographed but not removed, since it was not strictly amateur. In one outhouse, a pair of hand-wound slider type inductances were unearthed, which must have been used for the reception of the very long wave stations (of the order of 30,000 metres) so common in the early days. These were removed, and cleaned up by some IRTS volunteers, as they are typical examples of construction of the day.

Later some samples of Quartz crystals in various stages of completion were examined, recalling the fact that crystal cutting, grinding and calibration was one of the Colonel's prime interests.

The Society possesses some beautifully finished examples of his work in this field.

Also available for inspection was the Colonel's work-book (he was a very methodical experimenter and kept detailed notes) in which was one of the most historically interesting pieces of information of all – that is to say, a photograph of the gear on which he based the aforementioned claim to be the first non-professional station in the world.

It was, of course a spark-gap and coherer job, is dated 1896, and bears the caption in the Colonel's handwriting that it "worked perfectly over 70yds". This was a find indeed, and well repaid our visit to Baltinglass.

Dublin Wireless Club

So this was the man who together with Joe Campbell and Howard Duncan formed the Dublin Wireless Club on June 25th 1913. Not a lot is known about the workings of the DWC except that meetings were held fairly regularly either at premises at Harold's Cross, at 32 Wicklow Street, or at the Irish School of Wireless in Sackville St. (O'Connell St.) of which Mr P.K. Turner the proprietor, was a member of the DWC. It is on record that the DWC was allotted space for an exhibition of gear at a display put on at the Model Engineers Society (probably in the Engineers Hall, Dawson St.).

(Continued on page 13)

(Continued from page 12)

The aforementioned Mr. Turner installed some ships gear and succeeded in copying ships at sea and also signals from Eiffel Tower although limited to an indoor antenna.

A Mr J. Smyth gave lectures on the Wheatstone Bridge and Ohms Law and telephone and telegraph circuits dealt with apparently at some length.

All these activities took place in late 1913 and early 1914 as of course the Great War of 1914 – 1918 was looming up.

In these far off days, by the way, there were no licences as we know them today, but mere recognition of the fact that that so and so was experimenting.

Neither were call-signs allotted, experimenters chose their own. The only requirement being that an “X” be incorporated..

Col Dennis for instance was working as DNX. Also bear in mind that there were no Handbooks carrying any technical data likely to be of use to an amateur, and of course no magazines devoted to our hobby.

The great sources of information were “Wireless World”, “The Model Engineer”, “The Electrician”, “English Mechanic” and similar publications. Frequencies were largely self-assigned also.

The Hon. Secretary was A.C. Bridle, 29 South Anne St.

This was the position at the outbreak of the first World War in August 1914 – the DWC with a handful of transmitting members together with an unknown number of non-transmitters.

The Club, of course had to remain dormant during the War, and indeed for a long time after the cessation of hostilities, as we here in Ireland had our own troubles.

It was into 1923 before even the receiving of broadcasts was permitted – the British Broadcasting Company as it was then called, having commenced operation in that year on a full basis.

Radio Association of Ireland

However, before that date, a group of enthusiasts at the Technical School in Kevin Street, Dublin had formed the Radio Association of Ireland in 1922, under the guidance and Secretaryship of Hal Hodgens, whom we are glad to say we still have with us.

The RAI aimed at being a National Society embracing all radio interests, home construction, the radio trade, listeners, etc. and at providing lectures and demonstrations.

The Hon Vice Presidents included the professors of Physics of the four colleges in Ireland together with that of the College of Science.

A monthly publication, the Irish Radio Journal produced its first issue in December 1923, and became the Official Organ of the recently formed Radio Association of Ireland, which we have already heard about. Meetings of RAI were held regularly at 3 Molesworth Street, Dublin and later at 20 Harcourt Street.

With the increasing interest in Wireless and the reception of Broadcasting (which reception had to be carried out under cover, for some time yet, as receiving licences even then were not being issued) the membership of RAI rapidly grew and some provincial branches were set up. It would appear that history repeats itself in these matters also, as records show that the Limerick branch was the most active, and in fact carried two sub-branches in Limerick County.

As a matter of interest to our Region 4 members, the Limerick branch Secretary at the time (round 1924 or 1925) was a Mr. H. Kearney of Fitzpatrick’s Restaurant, William St. Limerick.

The Journal notes the emergence of other Societies about this time, mainly of a confined membership type, such as the College of Science Radio Society, for students and graduates of that body. However, after a few meetings nothing more was usually heard of them.

These remarks, however, do not apply to the Dublin Wireless Club, which was still carrying on steadily, if not having the large numbers associated with the RAI, embracing as RAI did, broadcast receiver, experimenters and listeners.

The correspondence columns of the Journal carry complaints in 1924 and 1925 that transmitting licences have not been issued despite the fact that every so often the Journal prints the conditions pertaining to the issue of these, presumably emanating from official sources.

Strangely enough, none had been yet granted in Northern Ireland either, although English amateurs were working. Eventually the first GI was issued, GI5NJ to the late Frank Neill of Whitehead, Co. Antrim.

Incidentally GI was a new departure at this time, English, Scottish, Welsh etc stations were all operating as plain G.

Wireless Society of Ireland

In 1923 the RAI asked the Dublin Wireless Club to join with them, as while the Club had remained more or less static

since the War ended, the RAI had attracted a large membership (catering as it did for all radio interests) due to the upsurge in interest in wireless, it seemed that a large National Society was desirable.

Similar changes were taking place in England, leading eventually to the formation of the RSGB.

The RAI and DWC (there were of course a number of people members of both bodies) finally amalgamated in 1925 and the new body took the name of Wireless Society of Ireland.

Prominent in effecting this merger, and indeed all amalgamations of a radio nature in this country was Hal Hodgens, always a solid worker in the cause of amateur radio and so well known all over the world by the hundreds of ship’s Radio Officers who have passed through his hands.

First President was G. Marshall Harris of DUT. Co. fame.

The WAI was fortunate in obtaining a good club room at low rent on the top floor of the Phoenix Assurance Company in Trinity Street, Dublin and this room was retained on into the early Thirties.

A very long aerial was erected running over to Exchequer Street, apparatus was bought to make up a transmitter and receiver, batteries and a DC generator acquired and last but not least the necessary licence was obtained, things having changed since before the War.

This was not the only change that had taken place however – call-signs were now allotted and some attempt was being made to lay down bands for amateur working.

Quite a number of G stations were working, some still on the medium wave band, but 46 and 23 metres were popular.

The EI prefix had not yet been allotted to the Irish Free State as we were then called. We shall deal with the call sign situation presently.

The WSI, under the secretaryship of Howard Duncan GW1GB of Sandycove did not lose much time in making an impression on those members of the public who were interested in wireless – and at the time, 1925, this meant just about everybody.

By and under the control of the WSI a Radio Exhibition was organised and held in the Mansion House in the November of that year. This was a huge success, practically every Trade house in the country

(Continued on page 14)

(Continued from page 13)

took part and the Society's own stand occupied a place of honour on the rostrum. This Exhibition laid down the foundations of a very strong financial position for the Society.

Numbers of new members were recruited and it was about this time that Senatore Marconi became a patron of the Society. The Dublin transmitter 2RN in course of installation put our special transmissions for the benefit of the public, and needless to say, these aroused great interest.

At every subsequent Exhibition, while WAI was not involved in the running, the organisers allotted free space to the Society, and their stand always attracted a lot of interest.

The Irish Radio Journal, whose editor was W.R. Burne GW1B5 holding the call G2KW, had been, prior to the merger in 1925 printing the notes of both bodies. After then formation of WSI a section was now devoted to the combined Society and included in every second issue, as the Journal had now become a fortnightly publication.

The DX notes were compiled by Mr. H. Goldsborough GW19B of Fethard Co. Tipperary where he was postmaster.

From the notes it appears that Col. Dennis GW1 1B was well known on the DX bands. Some nice stuff was being heard and worked, which was a very fine performance when one takes account of the equipment at the disposal of the boys at that time.

Col. Dennis and his contemporaries were working places like (we will use the present – day prefixes) VK ZL, PY, VE and so on.

At the time none of stations mentioned were using mains power supply, either because they had none laid on, or they were D.C. mains or because suitable transforming and rectifying gear was not available to them. This applied, of course to both the transmitter and the receiver. As an instance of the power levels in use, the O'Dwyer brothers are on record in 1926 as using 2 watts, later going QRO to 17 watts.

Col. Dennis about that time acquired a ML rotary converter, a very desirable piece of equipment in those days, running off car batteries and giving about 18 watts at around 400 volts. There were of course no mains available at the Col's QTH in Baltinglass.

Shortly after the WSI venture into the Exhibition field, they were instrumental in arranging a visit of P.P. Eckersley, Chief Engineer of the BBC to speak to a

meeting in the Mansion House sponsored by the WSI.

This was also a great success, Eckersley being to broadcasting what Patrick Moore is to Moon travel. One of the great bugbears of broadcast listening at the time was misadjustment of the straight receiver popular in those days allowing it to go into oscillation, and thus interfering with the neighbour's reception. Eckersley's catch – phrase "Don't do it" (referring to oscillation) was on everybody's lips.

From its formation the WSI had been affiliated to the RSGB, and indeed was looked upon by this body as the Irish Free State section of the British Empire Radio Union.

Apparently there was some discussion concerning this at some of the meetings, as the notes for the 1927 period show that a vote was taken in November resulting in the status quo being maintained. Hal Hodgins was now acting as Hon. Secretary of WSI and the notes were appearing in the Irish Radio Review, which was the new title of the Radio Journal, and edited by Mr Hodgins old friend, Mr Jim Kitchin, a great friend of the amateur cause, and who had been associated with Hal in the formation and running of the Radio Association of Ireland.

Perhaps this is the right time to say a word or two about the call-sign situation, even though we may get a little out of chronological order. Remember that until the outbreak of the First World War the British P.O. regulations were those in force – licences not being re-issued until well in the Twenties – and then of course, the Irish Free State was in being, although its rules and regulations then as now for the Amateur Service, were very similar to those in the UK.

Well then, from the time of the Formation of the Dublin Wireless Club in 1913 until the war, three letter calls (provided one of them was "X") were largely self-allocated, as for instance DNX for Col. Dennis. The derivation of this is obvious. After the 1914 - 1918 war and up till 1928 when the present system, of agreed International prefixes was introduced, a rather confusing arrangement of what were known as "intermediates" was used. For some reason the ARRL had a great liking for this system, but were never able to get it accepted by amateurs at large. The licensing authorities of the various countries could not see any reason for international prefixes at all, probably not dreaming that amateurs could get out of

their own backyards anyway, so why should their call carry identification of nationality!

The intermediate system worked like this: the intermediate for Great Britain was G, USA was U, Holland was N, the Irish Free State was GW, any portable was X and so on. Then if one heard 1MO 1MO 2OD 2OD this indicated that British 2OD was calling United States 1MO. Similarly 1MO UGW 11P would mean that Col. Dennis in the IFS was calling the famous Fred Schnell in the States.

International Prefixes

After 1928 when the agreement regarding the international prefixes was implemented, the letters EI were allotted to the Irish Free State.

The authorities here did not at that time favour the use of the figure "1" in conjunction with EI presumable because it had previously been used with the GW, the result was that Col. Dennis became EI2B, the WSI station EI3B and the remainder of the amateurs holding GW calls merely dropped GW1 and substituted EI- as for instance the O'Dwyer brothers formerly GW18B became EI8B. For the record, the first dozen or so calls are listed, with the approximate date of issue where known.

- GW1 1B Dennis, Baltinglass. EI2B (ex DNX)
- GW1 2B Wireless S. Ireland (fixed station) Trinity Street. 1925
- GW13B " " (portable call) 1925
- GW1 4B Campbell, Sutton March 1926
- GW1 5B Burne, Dublin (also 2KW)
- GW1 6B Duncan, Sandycove
- GW1 7B Warren, Sandymount
- GW1 8B O'Dwyer brothers, Dublin
- GW1 9B Goldsborough, Fethard. Co. Tipperary June 1926
- GW1 1C Bradshaw, Dublin
- GW1 2C Carder, Dublin
- GW1 3C Boursin, Listowel (uncle of present EI4R)
- GW1 4C Kennedy, Dublin October 1926
- GW1 5C Bates, Rathoath February 1927
- GW1 6C Horrander, Dublin
- GW1 7C Scott Brothers, Dublin
- GW1 8C Benson, Dublin (?) June 1927
- GW1 9C Pennyfeather, Cork October 1927

Both W.S.I call-signs were in the name of Hal Hodgins, present day EI5F

(To be continued)

Radio News Deadline Change Noon on Thursdays

**News Editor
Charlie Carolan EI8JB**

**Input for the radio news
should be sent via e-mail to
charlie.carolan@gmail.com
or newsteam@irts.ie
or by phone to 087-6265418**

CQ Communications Acquires WorldRadio Magazine

CQ Communications, Inc. has acquired "WorldRadio" magazine, CQ Publisher Dick Ross, K2MGA and "WorldRadio" Publisher Armond Noble, N6WR, announced jointly on November 12th. CQ, based in Hicksville, New York, currently publishes "CQ Amateur Radio, CQ VHF" and "Popular Communications" magazines.

"WorldRadio", based in Sacramento, California, has been published monthly since July, 1971, with a primary focus on the human side of ham radio. "CQ", a general-interest ham radio magazine best known for its support of DXing and contesting, has been in print since January, 1945.

Armond Noble, N6WR, Publisher of "WorldRadio", said that at the age of 74 the time had come for him to retire. "I wanted to be sure that 'WorldRadio' found a good home, and that our readers would continue to be served by an independent voice in amateur radio," Noble said.

"CQ" Publisher Dick Ross, K2MGA, said, "'WorldRadio' has filled an important niche in our hobby for nearly four decades. We welcome 'WorldRadio's' readers to the CQ family, and we look forward to meeting their needs for many years to come."

Current plans call for "WorldRadio" to continue to be published online as part of the CQ family of magazines, with Editor Nancy Kott, WZ8C, continuing in that position. "WorldRadio" subscribers will also have their subscriptions transferred to "CQ" magazine. Readers will be notified of details as plans are finalized.

Satellite Serving as Voice Repeater Expected to Go QRT by End of Year

Launched in January 1990, AMSAT-OSCAR 16 (AO-16) -- a digital satellite -- has been operating as a voice repeater since January 2008, using FM voice on the uplink and transmitting DSB voice on the downlink (best received on SSB). But according to the satellite's command team, the satellite's orbit might force this to end sometime before the end of the year.

According to Mark Hammond, N8MH, a member of the AO-16 command team, AO-16 has a hardware/watchdog timer that resets the satellite and shuts the transmitter down. This timer in AO-16 will fire -- and cannot be reset -- when the satellite's temperature is 15 degrees Celsius or cooler.

When the timer "fires," it shuts down the transmitter. "When the bird's temperature is more than 15 degrees Celsius," Hammond said, "the hardware timer behaves and continuous operations are sustained."

The satellite's temperature depends upon solar illumination. Hammond said that the "magic number" is around 85 percent of the orbit in sunlight: If the orbit puts AO-16 with less than 85 percent illumination, the spacecraft's temperature falls below 15 degrees and the hardware timer fires. "Illumination projections, as well as subsequent temperature predictions, suggest that we might be able to sustain operations until sometime in the window of November 22 until December 4, 2008," Hammond predicted. "So if you want to make some AO-16 contacts, you had better get them as soon as possible!"

Hammond said that long term-orbital projections suggest that if the satellite hardware remains fundamentally unchanged -- such as no deterioration of on-board components -- "it will be nearly 10 years before AO-16 receives sufficient illumination to warm up the spacecraft enough to again support sustained operations."

It is possible that the transmitter on AO-16 will turn off sometime in the next few days or weeks, Hammond said.

"This requires some commanding to get it running again, meaning a pass over the eastern coast of the United States is required for a change in operational status.

We expect that as the spacecraft cools down, transmitter shutdowns will become more frequent. You can be sure that we'll continue to probe the craft with commands, in hopes that we something will change in a good way that will allow us to use the bird for operations of some sort."

AMSAT Vice President of Operations Drew Glasbrenner, KO4MA, said the satellite hears very well; the reduced bandwidth by using either USB or LSB on the ground station receiver "allows for a very robust downlink. Tuning the downlink is just like on a linear transponder, meaning it is tight and with fast Doppler. Uplink tuning is not required, just as with the FM mode V/U satellites. My personal observations include being able to access and hear the satellite within one degree of the horizon, much lower than any other current bird for my location [in Florida]. This should be an easy satellite with omni antennas and a 70 cm preamp."

AO-16's uplink is 145.9200 MHz FM; the downlink is 437.0260 MHz SSB.

Users are asked to restrict their uplink power to a reasonable power level, and not to transmit without being able to hear the downlink; all general single-channel guidelines apply. "Enjoy this grand old bird while you can!" said Hammond.

(Thanks to ARRL Web Site)

Outgoing QSL Bureau

Please mail your cards directly to the Outgoing Bureau Manager:

Anthony Baldwin EI8JK,

Rathlin, Kilcrohane, Co. Cork.

ei8jk@amsat.org



21st IARU Region 1 Conference

by Seán Nolan EI7CD

The 21st IARU Region 1 Conference opened in Cavtat, Croatia on Sunday, 16 November. Over 140 delegates representing 52 Member Societies as well as IARU Headquarters and the other two IARU Regions were in attendance. The Society was represented by the President, Fr. Finbarr Buckley EI1CS and Seán Nolan EI7CD.

The Conference was formally opened by Kreso Antonovic, Director of Electronic Communications and Postal Services Directorate, Ministry of Sea Transport and Infrastructure. Also present at the opening ceremony were Madame Mira Buncic, the Mayor of Dubrovnik, Milenko Krvissek, Deputy President, Croatian Agency for Telecommunications and Post, Tim Ellam VE6SH, Vice President IARU and Kreso Koverik 9A5K, President HRS, the Croatian IARU Society which acted as organising hosts to the Conference.

On the Sunday afternoon meetings of the Working Groups on EMC, the Monitoring Service, EOROCOMM and Direction Finding were held.

Finbarr and I covered the first three of these.

IARU Restructuring

During the Conference, Tim Ellam gave a presentation on the work of the 2025 Committee. As the name suggests this Committee is looking at the future structure and organisation of the IARU.

While much of the detail, particularly the funding, has still to be worked out, the vision is that the IARU will be a single worldwide organisation headquartered in Geneva. Arrangements will be included to look after regional matters.

The view is that this new structure will make the IARU more effective and simplify the process of arriving at agreed worldwide strategies and positions which at present must be done firstly through the three quasi independent regional organisations.

Another interesting presentation was given by Alexander Gulyaev of the European Radiocommunications Office (ERO). Alexander gave an overview of the work of the ERO in relation to amateur radio. Among other things he outlined the progress on the implementation of the CEPT licence which has been adopted by 35 administrations and the HAERC level examination which has now been implemented by 31 administrations. We were interested to hear that work is ongoing between the ERO and the IARU Region 1 Radio Regulatory Working Group with the objective of making available a common multiple choice question pool for the HAREC.

The work of the Conference is organised through four Committees which deal with Credentials and Finance, Administration, HF and VHF/UHF/Microwave.

Only two of these Committees meet simultaneously so with early starts and long days it is possible for two delegates to cover the work of the conference.

Meetings started at 0830 and went on until 1800.

On two evenings there were workshops on Operating Standards and the Future Direction of Amateur Radio which went on until 2230.

The Committees dealt with something over 120 papers contained in about 500 pages of documentation. The committees make recommendations on the proposals in these papers and these recommendations are voted on individually at the final Plenary meeting. With just over 100 recommendations from the Committees to the final Plenary it would be impossible to cover them all in this short piece.

The following will hopefully give a flavour of the wide range of issues that were discussed and decided

- A more user friendly system for the submission and distribution of papers for consideration at Conferences was adopted
- The Executive Committee is to provide appropriate additional funding for EMC matters
- The EUROCOMM Working Group is to develop closer relationships with policymakers in the institutions of the European Union
- A revised bandplan for 40 metres was adopted for post 29 March 2009 when the segment 7.1-7.2 becomes amateur primary in Regions 1 and 3
- A revised bandplan for 135.7-137.8 kHz was adopted so that modes with a bandwidth of less than 200 Hz can operate throughout the band
- The Executive Committee is to allocate funds for spectrum defence activities. This replaces a mechanism under which spectrum defence funding relied on voluntary contributions from National Societies
- Joint action to be taken with Regions 2 and 3 to try to achieve acknowledgement by UNESCO that amateur radio is an activity that should be protected
- Contest organisers to introduce a new category of 'Youngsters and Newcomers'
- All IARU Societies to take steps to ensure that their regulatory authorities implement the WRC'03 modifications to Article 25 of the ITU Radio Regulations with regard to emergency communications



Seán EI7CD hard at work

- A range of actions to try to increase the number of radio amateurs
- The 500 kHz working group to be strengthened with representation from Regions 2 and 3 and to be re-tasked with the required preparatory work for WRC'11
- Member Societies to seek from their administrations access to frequencies around 500 kHz
- Greater effort to be made to find and support volunteers who can address the general trend of liberalisation in spectrum management through technically competent input on propagation as well as setting up scientifically valid long term assessment of the noise floor on the bands below 30 MHz with the intention of raising complaint over general loss of spectrum effectiveness for the amateur service



The Region 1 Executive Committee elected at the 2008 Cavtat Region 1 Conference.
L to R: ZS4BS, LZ1US, 6W1KI, F6IOC, 9A5W, PB2T, OD5TE, HB9JOE, G3PSM

- On the VHF/UHF/Microwave front the Conference approved nearly forty recommendations resulting in a plethora of detail changed in bandplans, calling frequencies and centres of activity
- FM simplex channels on the bands 50 MHz and above to be redesignated FM and Digital Voice
- The New n-N Paradigm by WB4APR was adopted as the common standard for APRS within IARU Region 1
- Spectrum requirements were agreed for the future and will be included in the VHF Managers Handbook. Included is a region wide allocation at 70 MHz
- It was agreed to encourage the deployment of multi-band VHF beacons at 40, 50, 60 and 70 MHz
- Member Societies to seek to secure an allocation at 3400-3410 MHz where this is not available already and also to try to have this segment designated also for the amateur satellite service as in Regions 2 and 3. Among other things this is in anticipation of a geosynchronous amateur satellite that is at the planning stage at present

During the final Plenary meeting on Thursday the important elections for the Officers and Members of the Executive Committee took place.

The results were as follows:

President; Hans Blondeel Timmerman PB2T,
Vice President; Mustapha Diop 6W1K,
Secretary; Dennis Green ZS6BS, and
Treasurer; Andreas Thiemann HB9JOE.

The Executive Members are Hani Raad OD5TE, Betty Magnin F6IOC, Nicola Percin 9A5W, Panayot Danev LZ1US and Colin Thomas G3PSM.

Colin was also appointed chairman of the important External Relations Committee which deals with interaction between IARU Region 1 and the international regulatory bodies. Colin's extensive experience with these bodies will stand him in good stead in this crucial appointment.

It was also announced at the final Plenary that the retiring Region 1 Secretary, Don Beattie G3BJ was being awarded the

Roy Stevens Trophy. The Trophy is in memory of the late Roy Stevens G2BVN who was a long serving Secretary of IARU Region 1 and is awarded for outstanding service to International Amateur Radio.

The announcement of the award was greeted with a well deserved standing ovation.

The final business of the Conference was the selection of the venue for the 2011 Conference with the UK, South Africa and Spain offering to host the event.

In a vote, Sun City, South Africa was selected.

The minutes of the various Committees and of the final Plenary meeting are available on the IARU Region 1 website at www.iaru-r1.org

The Society needs to be represented at these Conferences because among other things they are part of the self-regulatory process of which amateur radio is rightly proud.

Matters are discussed, opinions expressed and consensus is sought on a wide range of issues which are important to amateur radio.

Common strategies throughout the IARU are developed at these Conferences and at similar ones in Regions 2 and 3. It is these common strategies that achieved the 10, 18 and 24 MHz bands at WARC'79, the expansion of the 7.0 MHz band in Regions 1 and 3 at WRC'03 and secured agreement at WRC'07 to place consideration of an allocation at 500 kHz on the agenda for WRC'11.

As I have said before, the cost of sending delegates to these Conferences is a small price to pay for playing an active role in the IARU and helping to maintain it as the worldwide representative body for amateur radio and the radio amateur.

The overall cost for the two delegates was €3,000. This comes from a designated fund set up about 25 years ago for this purpose and a small part of the annual subscription income of the Society is lodged to this fund.

As these Conferences occur only once every three years the cost is €1,000 per year or about a Euro per member per year. The per capita cost would be even less if all those who should be, were members of their National IARU Society.

Irish Experimenters

George Francis Fitzgerald

George Francis Fitzgerald was born in Monkstown Co. Dublin in 1851. His father was the late Church of Ireland Bishop of Cork and his mother Anne Stoney came from a well known Dun Laoghaire family. Her brother George Johnston Stoney was the eminent Physicist of Trinity College, who among many notable contributions named the electron. He was also a member of the Royal Irish Academy.

He received his early education at home where he and his brothers and sisters were tutored by a sister of George Boole, the professor of Mathematics at University College Cork, and the inventor of Boolean logic and who is widely acknowledged as the "The father of Computer Science", Fitzgerald was very able at mathematics and entered Trinity College Dublin at the age of 16 where he studied mathematics and experimental science. He graduated in 1871 at the top of his class. He continued on studying for another six years before he attained his goal of winning a Trinity College Fellowship in 1877

Fitzgerald took a keen interest in the work of Clark Maxwell's "Treatises on Electricity and Magnetism" published in 1873. Maxwell proposed a theory of electromagnetism which described how light travels through space as a coupled electrical/magnetic disturbance. Fitzgerald was one of the minority of scientists who appreciated the full significance of Maxwell's work and he began to push the theory forward.

He was appointed Professor of Natural and Experimental Physics at Trinity in 1881. After winning a fellowship he began publishing his research results, principally his work in optics and electro dynamics. In 1899 he was awarded the prestigious Royal Medal of the Royal Society of London. In the meantime he had married the daughter of the Provost of Trinity, who was himself a distinguished Professor of Physics. By the time he died less than eight years later he and his wife Henriette had eight children, 3 sons and 5 daughters.

At the end of the 18th century scientists were assuming that the earth was surrounded by some medium that transmitted light rays of waves, which they were to call the **ether**. Many experiments at

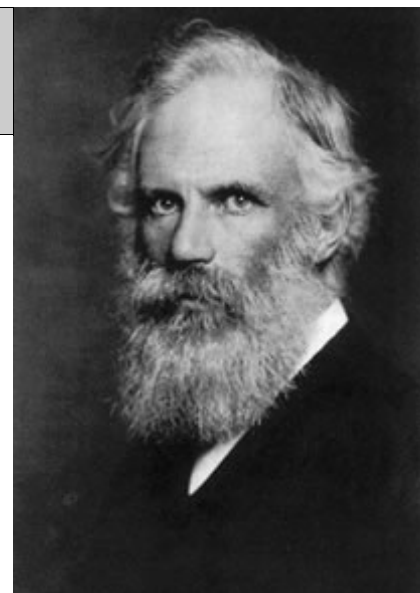
the time, the most famous being the "Michelson-Morley" in 1881, failed to prove conclusively of its existence. The problem was that if the nature of light was considered to be a pure wave how could it travel through space if the ether didn't exist?

It was at that stage that Professor Fitzgerald suggested the reason for the failure of Michelson-Morley to detect the ether was because of contraction, by which he meant that a "body in motion undergoes contraction". He used an example of this being a ship moving in water having contraction to its bow due to the pressure of the water. He proposed that moving bodies contract in the direction of motion and that the contraction cannot be measured because the measuring rods shrink in the same proportion. His theory on the relativity of space with speed was later proven by a Dutch scientist called Lorentz. This theory of contraction is now known as the Fitzgerald-Lorentz theory. This was the first incomplete theory of relativity. Much later this same theory was to be used by another famous man – Einstein with his theory of relativity in 1905. But this was not the area where Fitzgerald did most of his work.

He attended a Conference of the British Association for the advancement of Science, which was held at Bath in the following year. It was at this conference that Fitzgerald read a Paper promoting the further study of the science of the Hertzian waves.

Fitzgerald concluded from his study on radiation in 1883 that an oscillating electric current would produce electromagnetic waves – a concept well known to us as amateurs! When Hertz succeeded in producing these electromagnetic waves in 1888 and proving that they could be used in the development of wireless telegraphy, Fitzgerald was the first to suggest a method of producing radio frequency waves that are so widely used today for radio and TV and navigational aids, mobile phones, satellite communication and radio astronomy and by amateurs.

In those days the Department of Science and Physics was not looked upon as very important in the College, the medical faculty being considered the more important. Fitzgerald being the new Professor of



George Francis Fitzgerald

Physics was to change all of that. He organised to have rooms available with water and gas and workbenches to carry out practical work, which in the past was unheard of. When he had his Laboratory set up he taught his students how to go about doing practical experiments. They were to see for the first time what had in the past had been only book work. The result of this practical experimentation was that the number of students doing Physics in the following year outnumbered those for Medicine!

He was a very dedicated teacher of practical work as we have seen from the first years after his arrival in Trinity. He felt strongly against closed trades such as stone masons etc. The reason for this was that they were closed and entry controlled. This concerned him as he felt there were a great number of youths around the country who would wish to become tradesmen, and who would probably turn out to better at the job than some of the sons of these craftsmen. It was he who convinced the Corporation of Dublin to open such a school for to train the youth of Dublin for such trades as would be required in the building trade. The first of these schools was opened in Dublin in 1887. It was the Technical School, Kevin St., which in later years was to incorporate the School of Wireless Telegraphy.

In 1894 there was an upsurge in the continent in Gliders and in attempts to fly. This interest spread to Trinity. We learn that the Professor had his students help him to build a glider. All was ready in the summer of 1895 and tests were carried

(Continued on page 19)

The Mayo Radio Experimenters Network wish to thank all the traders and customers who attended their recent rally in Castlebar.

The rally was bigger than last year and this was largely due to all who spread the word of the late change of venue, so effectively.

The club also wishes to thank the management and staff of The Welcome Inn Hotel, especially Adrian Healy, who helped so much in securing the venue and for his hard work on both Saturday and Sunday.

The above statement issued to the IRTS News service by the Mayo Radio Experimenter Network does not do justice to the club's outstanding achievement in holding a rally at all this year.

At two days notice, a new venue had to be found and word had to be spread throughout the experimenter community in Ireland.

Both tasks were accomplished with great success and the fine attendance from all over EI and GI bears testament to this. The new venue was excellent and it is now certainly Ireland's biggest and best rally.

Congratulations to all involved especially rally director Padraic Baynes EI9JA.

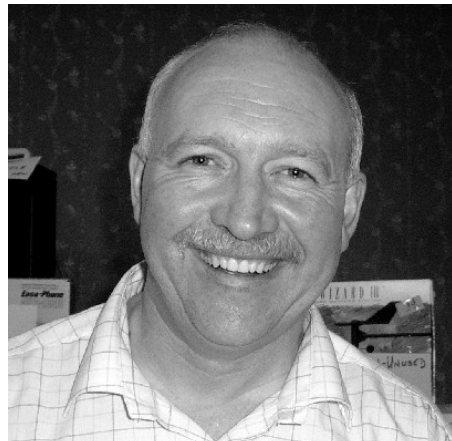
(Continued from page 18)

out on the cricket grounds of the college. It is reported that he was so pleased with the tests that he got into a seat he had fitted in a space between the two wings. He gave the boys instructions to run as fast as they could across the playing field but sadly the glider failed to rise and turned upside down tossing the professor out on the ground. This we understand was the end of his attempt to fly.

He interested himself in all new technical developments and was keenly followed the work of a new Italian scientist called Marconi and his experiments with electromagnetic waves. He forecast that he would go far. He was remembering his early years interest in Hertz and Maxwell. He was a true experimenter.

It is sad to say that he died at the early age of 50 in 1901. He was truly a man of science before his time.

Mayo Rally 2008



**Mayo Rally Director
Padraic Baynes EI9JA**



3DA0SS Swazi Scouts on 51st JOTA

After the IRTS Afri75 Dxpediton to Hawane Resort in Swaziland in March 2007, Daniel ZS6JR suggested to me that I might be interested in operating a JOTA station for the scouts in Swaziland in October this year.

The CQWW SSB contest would be the weekend following JOTA and Daniel was looking for operators to run a contest station from Hawane.

My wife and I had been out to Namibia in February and I was quite keen to get the excuse to go back to Hawane and perhaps also the Kruger National Park.

Gillian (GI8MIV) had been bitten by the safari bug in February and happily I was able to persuade her to come with me in October.



evening until the Sunday morning. They learned about phonetic alphabet and all had the opportunity to speak on the air from the station to other scouts.

Station statistics:

510 QSOs

74 countries

24 CQ zones

14 US States

A total of 50 GB & Ireland stations were worked of which 9 were GB prefixes, 5 were GI/MI, 3 were EI, 5 were GM/MM, 3 were GW/MW/2W0.

Swazi Scout Thirst For Life Project

On the Tuesday following JOTA Daniel, Gillian and I drove out beyond Manzini to visit the Swazi Scout Thirst For Life Project farm where they have their KIP chicken rearing project. They plan to run an International Scout camp there in August 2009.

I was quite surprised to find that the farm is quite rural and is 7km from a main road along a dirt road. Access to the site by visitors from overseas will be by bus from Manzini which passes the farm once a day. The Swazi Scouts are very enthusiastic about their farm but their numbers are few and there is a lot of work to be done.

They have been helped in the past 3 years by visits from scouts from the UK who have helped to clear part of the site.

All the help and sponsorship is very much appreciated.

David GI4FUM/EI4DJ

IRTS Supports KIP Chicken Project

IRTS has financially supported the KIP chicken rearing element of the Thirst for Life project.

Excess funds received with QSL cards from the Afri75 expedition, together with generous donations from members has been forwarded to the scouts to assist with the project.

The IRTS committee together with the sponsors of the CQIR contest have agreed that excess funds from that event will also be donated to this project in good time for real progress to be made before their International Camp in August 2009.

Any members wishing to assist contact any member of the committee.

Paul EI2CA



We flew out to Johannesburg on 14th October, hired a rental car from O.R.Tambo Airport and stopped over a night in Pretoria before driving up to Swaziland.

The roads from Pretoria to the Oshoek crossing post are good and the drive took us 4 hours. We arrived in Hawane on Thursday 16th October and the first job was to help Daniel erect the 1/4 wave vertical and 28 x 40m radials for 80m. The 60ft tower with A4S and 40m 4 square are still in place. We started testing on air later that afternoon running Daniel's FT100MP and IC2KL.

Hawane Resort is in the mountains of Western Swaziland at 4,500ft ASL near to the border with South Africa and 15km West of the capital Mbabane.

3DA0SS operated 16th to 19th October 2008. A group of 10 Swazi scouts and leaders back packed with us from the Friday



Daniel ZS6JR in check shirt and David GU4FUM/EI4DJ (with hat) with Swazi scouts.

80 metres Counties Contest

New rules about Modes and Frequencies

Rules for the 80 metres Counties Contest, which takes place on Thursday 1st January 2009, were published in the October-November 2008 issue of Echo Ireland - they are also available for download at www.irts.ie/rules

In previous years, during this contest there has been a lot of contest activity around 3.680 MHz, a popular frequency for those chasing Worked All Ireland squares. This frequency is however outside the contest-preferred parts of the 80 metres band. To encourage all participants in the Counties Contest to adhere to the Band Plan, we have amended the contest rules to make it a requirement that the IARU Region 1 Band Plan should be observed. We have also provided that CW contacts in this contest should only be made in the recognised CW end of the band.

While 3.775 MHz to 3.800 MHz is within the SSB contest-preferred segment of the band, the Band Plan also indicates that priority should be given to intercontinental operation in this segment. Given that the Counties Contest is largely a local contest, we have indicated therefore that no operation should take place above 3.775 MHz.

In summary, the frequencies available to contesters in the 80 metres Counties Contest are:

CW 3.510-3.560 MHz; SSB 3.600-3.650 & 3.700-3.775 MHz

Webmaster Wanted

The role of the IRTS web site includes keeping members informed about local and international amateur radio activities, encouraging members to continue their membership and motivating potential members to join, promoting the activities of radio experimenters and the hobby of amateur radio.

Being a single source of information on matters of interest to Irish radio experimenters which would include, for example, club activities, contest results, repeater frequencies, band plans and forthcoming rallies.

The job of the Webmaster is to maintain and develop the web site so that it fulfils this role in an interesting and accessible way. IRTS is looking for applications for the position of Webmaster. Like all of the society's officer positions, this is a voluntary position.

Members interested in being appointed Webmaster should indicate their interest to the society's president Finbarr Buckley EI1CS (buckleyf1@eircom.net) and demonstrate their web skills by supplying links to web sites or web pages which they have developed.

Amateur Radio Blogs

Many radio experimenters are now maintaining online journals of their amateur radio activities. By now there are probably thousands of amateur radio blogs on the web, covering such diverse topics as DX, home brewing, CW, moonbounce, solar flares, antennas and so on.

A lot of interesting reading can be found in these blogs, and most provide the reader with an opportunity to post a comment or reply to a question.

The webmaster has provided links to a sample of amateur radio blogs, so have a look at www.irts.ie/blogs if you want to see what other experimenters are talking about.

Congratulations

Congratulations to Nollaig and Conor EI4JN on the birth of baby Mathew Brendan who was born on December 7th at 10.58GMT weighing 8lb 12oz. Conor is Director of operations for the IRTS Emergency Communications Service, AREN.

IRTS Radio News Deadline Changed.

There is a new deadline for the Radio news.

The deadline is now noon on Thursday's for the following Sunday's edition.

This change will allow more time for editing and the news should be received by the readers sooner as a result.

Items for inclusion in next weeks Radio News should be forwarded to Charlie EI8JB, via e-mail to charlie.carolan@gmail.com.

You can also phone Charlie at 087-6265418

News can also be submitted via e-mail to "newsteam at irts dot ie" for automatic forwarding to both the radio and printed news services.

30 metre modes

Dáithí GI7OMY, who is the award manager for the 30 metre digital group for WISE (worked Wales, Ireland, Scotland and England) has pointed out that he has had to reject several applications recently where one of the submitted QSOs showed an EI station operating PSK on 30 metres, because Irish regulations allow Morse only on the 30 metre band.

While the IARU band plan shows "digimodes" from 10140 to 10150, the regulations for EI experimenters do not allow digimodes on this band.

IRTS plan to ask ComReg whether the restriction for EI experimenters is really necessary, given the provisions of the band plan, but pending any change in the regulations, EI experimenters should stick to CW only on 30 metres.

IOTA Contest Final Results

The final results for the 2008 IOTA Contest have been published. As far as EI/EJ and GI stations are concerned, the final results show no change in total scores since the publication of the provisional results in October. The category positions are also largely unchanged, with just two small amendments as a result of an entry on Germany's Rügen Islands being moved from the "DXpedition" to the "Fixed" category (this affected the category positions of EI/DK2AT/P and EI4II only).

The IRTS web site has the final results for EI/EJ and GI stations at www.irts.ie/iota which also has a link to the complete results for this contest.



Contest Corner

by IRTS Contest Manager Thos Caffrey EI2JD

We have come to the end of another contest year but that means we can start thinking about the year ahead.
What contests are on?
What contests will I do?
How can I be more competitive?
How can I improve my station?
How can I improve my rate?
I could go on and on but little by little, step by step is the way to go.

IRTS Contests

As well as the big established contests like the CQWW 160, DX and WPX the ARRL tests, IOTA, Scandinavian Activity, EU Sprints and the many National contests I would like to remind you all of the IRTS contests you can enter.

These are the 80m Counties, both sections of the 2m Counties, the VHF/UHF and HF CW and SSB Field days. Information about dates, times, rules and results can be found on the IRTS website. www.irts.ie/cgl/contests.cgl

80m Counties Contest

The first contest of the year is the IRTS 80m Counties, which will be held on Thursday 1st January 2009, running from 1400 to 1700 utc.

I would like to bring your attention to an addition to the rules. This concerns the portions of the 80m band where we should and should not use.

Rule 4.4 The IARU Region 1 Band Plan should be observed, and in addition:

*CW contacts should be made only in the recognised CW end of the band
As this is a local contest, no operation should take place where the Band Plan indicates priority for Intercontinental operation.*

*Rule 4.5 Frequencies:
CW: 3510 – 3560
SSB: 3600 – 3650 & 3700 – 3775*

Please remember the Band Plan is there to help us ALL use the band. We are not all interested in contesting so please leave the other portion of the band free for the non-contesters to use and enjoy as they wish.

Looking at previous years results the amount of QSO's have improved each year, from 103 (EI4BZ) in 2006 to 107

(EI2JD) in 2007 to 175 (GI0RTN) in 2008.

In 2007 there were 28 counties activated while in 2008 an addition of 3 more brought it to 31 counties activated.

I believe the elusive county is either Monaghan or Sligo, so come on folks, whoever activates this one will be well sought after.

Looking at the scores from last years SSB Fixed section the difference in 1st and 4th place was the multiplier effect of one county. Both entrants had 136 QSO's but Pat EI9HX had 31 counties while Thos EI2JD had just 30.

SWL's please remember there is a section for you also so please send in a log.

Contest Logging

Let me move onto another very important part of contesting, that is LOGGING. Since I have taken over as your Contest Manager I have been very surprised at the logs received. I had imagined that most would be in digital format, emailed to me as a Cabrillo File from a logging programme or as a Word Document, with maybe a few hand written and sent by post.

To date it is about 50/50 with a few of the latter being hard to read and tardy.

At the very least I would expect a hand written log to be on a log page from a log book. These have always been available at the IRTS stand at every rally and are still in stock.

(Contact Peter 4HX or Pat 2HX).

Another surprise was the absence of relevant information on some of the logs ie, report sent and report received. There is no use sending in a log with 59 001 sent and only 59 received, the serial number of the received station is missing and so cannot be checked and does not fulfil the required format.

At a recent IRTS Committee meeting an item was raised on hand written logs and the consensus was that all logs should be sent by email. I myself agree with this BUT do not want to frighten away any of our testers. So for the coming year at least hand written logs will still be accepted but please, please, please put them on a log page.

For those of you who email as a word document or similar, this is still very much an acceptable format but can I suggest an easier way, ie: Logging Programme.

In today's world a lot of these logging programmes are free and are designed to give the reports for individual contests. One I would like to suggest is SD, the Super Duper logging programme by Paul EI5DI. www.ei5di.com

I find this to be the best Single Operator programme out there.

Many times I have asked Paul to go a step further and make it networkable, but he just keeps saying no (but you never know, he he).

SD can handle the IRTS 80m Counties Contest. Paul is constantly updating the programme and to date Version V14.15 is available as a download on the website.

In another part of contesting you do not even have to be a tester. Sounds weird I know, but as a non tester, as you are tuning through the bands and you hear another EI calling CQ TEST, stop and give him some support. Give him a call, you never know, you could be an illusive multiplier for him and worth many points to his score. Do not worry if you do not know the format of the report, he will tell you what you need. Depending on the contest it could be your zone or a serial number starting at 001, so armed with this info you could go and give a few other people a few points, don't forget that this is a good and quick way of building up your DXCC totals.

For the team events (multi-op) the first choice logging programme seems to be "Win-Test", which can be downloaded at www.win-test.com. This is a French programme costing €45.00 payable via Paypal, for which you can put it on all your desktops and laptops.

The big plus for this programme is the ease of networking and as with others it covers all the major contests.

Interesting Links for Contesting
www.sk3bg.se/contest/
www.hornucopia.com/contestcal/
www.ncjweb.com
www.contesting.com
www.radio-sport.net/

I hope some of the info here can help someone. If you need help or information about contesting send an email to contestmanager@irts.ie
Merry Christmas and a Happy New Year to all, see you in the 80m Counties Contest. On New Years Day..

G3USF's Worldwide List of HF Beacons

Latest Update 25 November 2008

Freq	Call	Town	Loc	ERPw	Ant	Direction	Mode	Status
1805	VO1NA	StJohn'sNFD		1	Omni			24
1810.5	YR2TOP	80kSSWResita	KN04RU	10/100			A1	24
1840	OK0EK	Kromeriz	JN89QG	4	Vertical	Omni	A1	TNonOp
1843.15	7I1DFS	NrLaSpezia	JN54AC				QRSS3	
1843.167	I1YRB	TorreBert(TO)	JN35UB	0.2	Vertical	Omni	QRSS3	24
1853	OK0EV	NearPrague	JN79EV	0.1	25mVert	Omni	A1	PT
3530	DK2CF	Olsberg	JO41GG	0.5	Dip@20m		F2	EXP/night
3540.25	I1YRB	TorreBert(TO)	JN35UB	0.2	Vertical	Omni	QRSS3	24
3542.3	SK6RUD			qrpp				
3550	ER1AAZ	NrKishinev	KN47IB	4	Dip@25m		A1	EXP/night
3571.1	ON6RL			0.5				
3577.0	IZ3DVW	Monselice	JN55VF	1.1	InvV	A1	24	
3579	DK0WCY	Scheggerott	JO44VQ	30	Dipole	A1		PT/zz
3579.8	SM2IUF	Kalix	KP15NU	QRPP			15-07UT	
3588	SP5ANU	Warsaw		0.5				?
3594.5	OK0EU	Pruhonice	JN79GX	1	Mag Loop	N-S	A1	24qq
3600.0	OK0EN	Kam.Zehrovice	JO70AC	0.15	Corner Dip	90/270	A1	24
3619	VK6SH	PerthWA	PF07XX	5	Vertical	Omni	A1	10-
3620	SZ6P		KM08JX	1				?
5195.0	DRA5	Scheggerott	JO44VQ	30	Dipole		A1, PSK, RTTY	24zz
5290.0	GB3RAL	NrDidcot	IO91IN	10<158uw	Vertical		A1	zzz
5290.0	GB3WES	Cumbria	IO84QN	10<158uw	Vertical		A1	zzz
5290.0	GB3ORK	Orkney	IO89JA	10<158uw	Vertical		A1	zzz
IARU Region1 discourages beacon operation on 7MHz								
7000.8	PE1MPL			QRPP			QRSS	?
7023}	ZS6SRL	Johannesburg	KG33WV	0.4				
7023}	ZS6YI	Johannesburg	KG33XH	0.4				
7023}	ZS4BFN	Bloemfontein	KG30DV	0.4				
7023}	ZS1AFU		KF07HN	0.4				
7023}	ZS2LAW	Grahamstown	KF36GQ	0.4				
7023}	ZS1HMO	SomersetWest	JF95PN	0.4				
7025	ZS1AGI	GeorgeAirport	KF16EA	0.2	1/2 Dipole	E-W	A1	24
7035	PY2RMF	NrCampinasSP	GG67LF	0.5				?
7037	RX3AXT			90mw				?
7038.500	OK0EU	Pruhonice	JN79GX1		Mag Loop	N-S	A1	24
7039	IZ3DVW	Monselice	JN55VF	0.5	Inv V		A1	24
7045	PY2WAP	PiracaiaAP	GG66VV	1			A1	?
7050	HK3QQ	Bogota			A1?			
7080.50	I1YRB	TorreBert (TO)	JN35UB	0.2	Vertical	Omni	QRSS3	24
IARU Region 1 discourages beacon operation on 10MHz (DK0WCY excepted)								
10125	KL1IF	Springfield MO	EM37IE	10	1/4 GP	Omni	A1	PT
10130	OK1IF	Liberec	JO40HG	0.5			A1	?
10132.0	VE3TO	Nr Ottawa	FN25EG	5	1/4 Vert	Omni	A1	24
10133	SK6RUD	Oxaback	JO67KI	0.5	1/4 GP	Omni	A1	24
10134	OK0EF	Nr Kladno	JO70BC.	1/2/51/2	Vert Omni		A1	24
10135.9	HP1RCP	Cerro Jefe	FJ09HD	2.5	Slope Dip	Omni	A1	24
10139.6	PY3PSI	Porto Alegre	GF49KX	1.6	Horiz. Dip	N-S	A1	IRREG
10140.0}	sub-audible QRPP/QRSS3 beacons around here							
10140.1}	including I1YRB, IW0HK, IK4IDP, I1DFS, IQ4FJ,							
10140.1	9H1LO	Malta		25mw	Horiz Dip		FSK	24
	IK0IXI			45mw	Dipole			
10140.6	DL5KZ	Numbrecht	JO30SU	0.1	Dipole		A1	?
10141.05	IKHGI	Tricati	JN45IK	0.1	Dipole		QRSS3	24
10141.8	IK3NWX	Nr Monselice PD	JN55VF	4.2	Rot. Dip.	E-	WA1	24
10142	SK3NWX?							
10144.0	DK0WCY	Scheggerott	JO44VQ	30	Dipole		A1, PSK, RTTY	24zz
10149.7	IZ8BZX	TorredelGrecoJ	N70ES.	1/5/1	Whip	Omni	QRSS	EXP

Emergency Radio Communications

Global Simulated Emergency Test

by Tim McKnight EI5GPB



Why would someone of sound mind get up before 4am on a dreary November morning to join in a global exercise in passing emergency communications traffic?

To answer this question at least from my perspective, I need to go back a bit - to my youth growing up in a small community in Mississippi.

I remember seeing the design of a crystal radio although I can't remember if I actually tried to build one. It seemed impossible that a cat's whisker (OK - just a thin wire in reality) touching a quartz crystal could actually produce an audible radio signal.

Fascinating. Then there was the solar-powered transistor radio that my father gave me.

Small transistor radios were rare enough in the early 1960s, but can you imagine one from that time with a small solar panel built neatly into the top?



THE OLD WOMAN TOSSED IN A BASKET

I still have it and it works to this day. A little later I discovered short-wave radio broadcasts. For years I listened to the BBC World Service at night and well remember its theme tune, 'There was an old woman tossed up in a basket,' that was played on the hour.

For me, short-wave radio was a window looking out onto a distant and mysterious world. Then there were the numbers stations and particularly the disembodied gongs of the spy station now attributed to East Germany. . . . But I digress.

Years later, despite my early fascination with radios I remember being puzzled by

the CB radio craze of the 1970s.

I can safely say that I was never bitten by that bug. I also couldn't understand what sane reason my brother-in-law, a licensed amateur, could have for sitting in front of an odd-looking radio talking with distant stations. Madder still seemed his preference for conversations using Morse code. Of course, some time later I discovered what he saw in it. This extended my fascination with radio in general and opened up to me the limitless world of amateur radio.

Today, amateur radio extends to an almost breathtaking array of technology and spheres of interest. Not that many years ago we had only the AM mode using CW or phone, but now we have almost countless modes and sub-modes. Some experimenters are attracted by EME (moon bounce) and satellite communications. Many are hooked on DX, and contests form a big part of this. Others prefer tinkering with the electronics and equipment and find little time for talk.

So what does all this have to do with emergency communications? The answer is that amateur radio provides something for almost everyone, including those with an interest in this area.

The IRTS' Amateur Radio Emergency Network was set up in the 1980s to provide an emergency communications resource for served agencies such as the Civil Defence, Garda, Fire Service and others.

AREN now has about 30 active members who take part in various support activities, exercises and training events—including GlobalSET.

GlobalSET, or to use its official name Global Simulated Emergency Test, is a half-yearly emergency communications exercise started in 2006 by Dr. Seppo Sisatto, OH1VR.

The first 'SET' in November 2006 involved 100 stations from 27 countries within IARU Region 1 - generally Europe, Middle East and Africa. Only with the November 2007 exercise did it become 'Global,' with stations from all three IARU regions invited to participate.

The most recent GlobalSET held on 8

November 2008 from 0400 to 0800 GMT had approximately 245 stations participating from 54 countries.

As expected, the USA (26 stations), Germany (17) and the UK (14) were well-represented.

More surprisingly, countries like Mexico, India, Malaysia, Argentina and China were also there in numbers. Ireland fielded six stations, EI2CA, EI3JB, EI3ENB, EI5GPB, EI7IG and EI9JV, which is a very respectable showing.

To experimenters who were up early enough to hear or see (digi modes were also used) the unusual exchanges between stations, one might be excused in thinking at first that GlobalSET is a contest. It is not a contest but rather an opportunity for emergency communications groups around the world to practice passing messages among each other.

Each station generates six messages according to a specific syntax, and seeks to transmit the messages (and receive messages from other stations) via other GlobalSET stations. The receiving station adds its call sign to the message, and then seeks to transmit the message to another station. The third station that receives the message then seeks to transmit the message to one of the headquarters stations for its final hop.

The message format includes the time it is first transmitted, originating station call sign, message number, band(s) available to the originating station, number of operators, power (mains, battery, generator, etc), and the station's emergency communications organisation.

For example, a message generated by AREN member Paul EI3ENB and passed in turn through stations DF3GY, 9H1MRL/D and OH3AG/D, should look like the following when it arrives at the HQ station:

'0421 EI3ENB M1 B80 B40 B20 B15 B2 O01 P3 AREN via DF3GY via 9H1MRL/D via OH3AG/D.'

Although it might look like nonsense, the HQ station is able to see the capability of the originating station and the path the message has taken on its way to the HQ station. Because all stations are asked to submit logs afterwards, later analysis can identify any errors that crept into the message along the way and where the

errors occurred. This information can be fed back to the national emergency communications groups for training and assessment purposes.

Some interesting observations arise from analysis of the results. Messages relayed by voice can take between three minutes and three hours to reach the destination, whereas digi modes were both faster (36 seconds) and much slower (7 hours 48 minutes) - the latter due to a variety of operator and system delays. Minor errors can be introduced very easily, and the diligence of both operators involved in an exchange is the only reliable way to eliminate them.

Conditions on this GlobalSET were again very difficult, and the odds are that this would be the case in an actual emergency. Towards the end of the GlobalSET, the 80m band closed almost entirely so some EI stations found that the only way to pass messages to the HQ station in nearby England was via a distant Bulgarian station on 20m.

So why would six AREN operators get up before 4am on 8 November to join in the GlobalSET?

Well first of all, it's a challenge - a challenge to find even one of only 245 stations operating worldwide, especially in the conditions that existed that morning. It is also a challenge to transmit and receive messages accurately.

If you consider that it could be an actual emergency and that the message you are trying to send could be critically important to someone, then having the practice could be valuable experience.

And this brings me to what I think is the main reason we do this exercise and why AREN continues to thrive: a desire on the part of experimenters to assist others and 'give something back' for the privilege of having this wonderful hobby. In the words of one, 'radio is a passion and this exercise combines something we all enjoy with the hope that if an emergency ever happens, we would be ready for it or at least we would have done our best to be prepared.'

The next GlobalSET is scheduled for 2nd May 2009 at the more hospitable time (at least for Region 1 operators) of 1100 to 1500 GMT.

Now you know that it's not a contest - it is for real.

Tim McKnight EI5GPB

Echo Ireland Download Page

IRTS members who opt to receive the newsletter, Echo Ireland, electronically instead of in hard copy are given a Username and Password which allows them access to the Echo Ireland download page.

This page has been extended, and now includes all issues of Echo Ireland from January 2001 to date.

The download page represents a really useful record of radio experimenter activities in Ireland and abroad over the past 7 years. The use of electronic download also, of course, helps to keep the Society's postage bill to a minimum.

Members who wish to have access to this download page and in future receive Echo Ireland by way of electronic download as an alternative to ordinary mail should contact the Membership Records Officer.

Include your call sign and email address in the request, and send it to "memrecords@irts.ie".

Radio Frequency Plan for Ireland

The fourth edition of the Radio Frequency Plan for Ireland has been published by ComReg. This document shows, for each frequency band, the types of radio services that are permitted for operation in Ireland and, in addition, the radio services that are currently in use in each band.

While this publication is by no means essential for radio experimenters (as our own frequency allocations are detailed in ComReg's "Radio Experimenters Guidelines"), the new document is of general interest, if only to note the wide range of services using the frequency bands and in particular to see the services with which we share some of the bands.

The Radio Frequency Plan for Ireland can be downloaded from the ComReg web site. A link to the download page for this document is currently in the "KEY CLICKS!" section of the IRTS web site.

Lisburn Radio Rally 2009

The Lagan Valley ARS Radio Rally will be held on Saturday, 14 March 2009.

Bigger and better than ever, the rally moves to a new venue at the **Village Centre, 7 Ballynahinch Road, Hillsborough, County Down.**

Please note the change of venue..

All the usual Traders will be in attendance and we hope to have some new attractions as well.

Refreshments will be available throughout the day.

Doors open at 11:30 and we look forward to seeing you in historic Hillsborough for a fun day out.

Further details from MI0BPB, GI4LKG or GI0DVU, all of whom are QTHR.

<http://gi0dvu.co.uk/lisburnrally.aspx>

Canadian Amateurs on 600 Metres

Industry Canada has accepted an RAC proposal whereby selected Canadian radio amateurs would be permitted to operate in the vicinity of 500 kHz.

These amateur operations would support Canada's efforts to action a proposal on the agenda of the 2011 World Radio Conference (WRC2011) which, if adopted, would create an amateur allocation in the 600-meter band.

Industry Canada have authorized RAC to recommend amateurs who would be licensed to operate in the 504 to 509 kHz band with a maximum power of 20 watts ERP and bandwidth up to 1 kHz.

Stations operating in this band would be technically operating under Special Developmental Licenses although they would all be radio amateurs.

Distinct call signs would be used and the licenses would be renewable annually subject to the amateur demonstrating the research he has carried out.

Contest Calendar

All Times UTC

December 2008

20	Sat 0000 - 2400	OK DX RTTY Contest	RTTY
20	Sat 0000 - 2400	Russian Digital + SSTV Contest	Digi
20-21	Sat 1400 - Sun 1400	Croatian CW Contest	CW
20-21	Sat 1600 - Sun 1559	International Naval Contest	CW/SSB
26	Fri 0830 - 1059	DARC XMAS-Contest	CW/SSB
27	Sat 0000 - 2359	RAC Canada Winter Contest	CW/Phone
27-28	Sat 1500 - Sun 1500	Stew Perry Topband Distance Challenge	CW

January 2009

1	Tue 0000 - 2400	ARRL Straight Key Night -	CW
1	Tue 0800 - 1100	SARTG New Year Contest -	RTTY
1	Tue 0800 - 2200	SCAG Straight Key Day - SKD -	CW
1	Tue 0900 - 1200	AGCW Happy New Year Contest -	CW
1	Tue 1200 - 1500	IRTS 80 Metres Counties Contest -	CW/SSB
5- 6	Sat 1800 - Sun 2400	ARRL RTTY Roundup -	Digital
5	Sat 2000 - 2300	EUCW 160 m Contest (1) -	CW
6	Sun 0400 - 0700	EUCW 160 m Contest (2) -	CW
12	Sat 0000 - 2400	070 Club PSKFest -	PSK-31
13	Sun 0530 - 0730	NRAU-Baltic Contest -	CW
13	Sun 0800 - 1000	NRAU-Baltic Contest -	SSB
13	Sun 0900 - 1059	DARC 10m-Contest -	CW/SSB
19	Sat 0400 - 1200	LZ Open Contest -	CW
19	Sat 0600 - 1400	CQ UT Contest -	CW/SSB
19-20	Sat 1200 - Sun 1159	Hungarian DX Contest -	CW/SSB
19-20	Sat 1200 - Sun 1200	UK DX RTTY Contest -	RTTY
26-27	Sat 0000 - Sun 2359	CQ World-Wide 160-Meter DX Contest -	CW
26-27	Sat 0000 - Sun 2359	YLISSB QSO Party -	SSB
26-27	Sat 0600 - Sun 1800	REF Contest -	CW
26-27	Sat 1200 - Sun 1200	BARTG RTTY Sprint Contest -	RTTY
26-27	Sat 1300 - Sun 1300	UBA DX Contest -	SSB

February 2009

7- 8	Sat 0000 - Sun 2400	Vermont QSO Party -	All
7- 8	Sat 0001 - Sun 2359	10-10 Internat. Winter QSO Party -	Phone
7	Sat 1600 - 1900	AGCW Straight Key Party -	CW
7- 8	Sat 1800 - Sun 1759	Mexico International RTTY Contest -	RTTY
7-8	Sat 2100 - Sun 0100	RSGB 1.8 MHz Contest -	CW
14-15	Sat 0000 - Sun 2400	CQ WW RTTY WPX Contest -	RTTY
14-15	Sat 1200 - Sun 1200	Dutch PACC Contest -	CW/SSB
14	Sat 1700 - 2100	FISTS Winter Sprint -	CW
15	Sun 0000 - 0400	North American Sprint Contest -	SSB
20-21	Fri 2100 - Sat 2100 *?*	Russian PSK WW Contest -	PSK31
21-22	Sat 0000 - Sun 2400	ARRL International DX Contest -	CW
21-22	Sat 0000 - Sun 2359	CQ WW 160-Meter Contest -	SSB
21-22	Sat 0600 - Sun 1800	REF Contest -	SSB
21-22	Sat 1300 - Sun 1300	UBA DX Contest -	CW
21-22	Sat 1800 - Sun 0600	North American QSO Party -	RTTY
22	Sun 0900 - 1100	High Speed Club CW Contest (1) -	CW
22	Sun 1500 - 1700	High Speed Club CW Contest (2) -	CW

March 2009

7- 8	Sat 0000 - Sun 2400	ARRL International DX Contest -	SSB
7- 8	Sat 1000 - Sun 1000	RSGB Commonwealth Contest -	CW
21	Sat 0001 - 2359	10-10 International Mobile QSO Party -	All?
21-23	Sat 0200 - Mon 0200	BARTG Spring RTTY Contest -	RTTY
21-22	Sat 1200 - Sun 1200	DARC HF-SSTV Contest -	SSTV
21-22	Sat 1200 - Sun 1200	Russian DX Contest -	CW/SSB
28-29	Sat 0000 - Sun 2359	CQ WW WPX Contest -	SSB

For details of smaller contests and links to contest rules and results try the following:

WA7BNM Contest Calendar <http://www.hornucopia.com/contestcal/>

SM3CER Contest Service <http://www.sk3bg.se/contest/>

Ham Radio has a Patron Saint!

I wonder how many of us were aware we indeed seem to have a Patron Saint?

GI70MY writing in the 30 meter PSK Yahoo group says that during the WW2 German occupation of Poland, a Ham radio Priest, **Fr. Maximilian Kolbe**, **SP3RN** was arrested by the Germans.

The Germans believed his amateur radio activities were somehow involved in espionage and he was transferred to Auschwitz on May 28, 1941.

After some prisoners escaped in 1941, the Germans ordered that 10 prisoners be killed in retribution.

Fr. Kolbe was martyred when he volunteered to take the place of one of the condemned men.

On October 10, 1982 he was canonized by Pope John Paul II as Saint Maximilian Kolbe, Apostle of Consecration to Mary and declared a Martyr of charity.

He is now considered the Patron saint of Amateur radio operators."

You can also check www.qrz.com/sp3rn

Echo Ireland has carried the full story of SP3RN on a few occasions.

Dublin European City of Science

Dublin has been chosen as European City of Science for 2012.

The event is expected to attract 8,000 Irish and international delegates to the city in July of that year.

Minister for Science and Technology Jimmy Devins said the decision today was "recognition of the great strides that Ireland has made in the area of science technology and innovation".

This is a great opportunity for experimenters to showcase the hobby and anyone interested in getting involved should contact IRTS PRO Paul Martin at paul@comma.ie

There is plenty off time to plan so let us do something we can all be proud of.



QSL card exchanging is an exciting part of our hobby for many and such QSL cards are confirmation of QSOs that have already taken place. What people do with these QSL cards depends entirely on the individuals themselves, however, for the majority, they are prized, cherished and valued cards which most collect and take care of as they can be used for credit towards many different radio related awards.

For the majority of awards, submissions of these QSL cards have to be provided in order for the required award to be issued. We have all heard time and time again, that the final courtesy of a QSO is a QSL !

As the ARRL sponsor some of the most sought after awards, i.e. DXCC, WAS & VUCC, a system was developed in order for participants to be able to claim these various awards without the need for mailing one's cherished QSL cards. Therefore, on 15th September, 2003, LoTW was born. At time of press, about 195,000,000, yes, 195 million QSOs have been uploaded and almost 23,000 unique individual callsigns are registered in the system.

What is Logbook of the world?

ARRL's LoTW system is a repository of log records submitted by users from around the world. When both participants in a QSO submit matching QSO records to LoTW, the result is a QSL that can be used for ARRL award credit.

LoTW can accommodate every user scenario. It makes no difference if you operate from home, portable, mobile or even from your holiday QTH or IOTA activation as it can be set up to properly process your logs and match QSOs for all of your operations.

To minimise the chance of fraudulent submissions, all QSOs must be digitally signed using a digital certificate obtained from ARRL. Obtaining one of these certificates requires verification of the licensee's identity by means of a copy of their Amateur/Experimenter's licence plus either a driving licence or passport. This basically proves one's identity to the ARRL so a certificate can then be issued.

Software developed by ARRL can be used to convert a log file (in ADIF or Cabrillo file format) into a file of digitally signed QSO data, ready for submission to LoTW.

Firstly, for obvious reasons, only those of you that run computer logs are eligible to participate. Internet access is also essential. Sorry for stating the obvious but, yes, I have been asked.

Logbook of the world is FREE, there is no charge for set-up or for your uploads. If you qualify for an award and if you wish to submit an application, then the usual charges apply.

You do not need to be a member of ARRL or in fact any society to be able to participate.

The free download is available at:

<http://www.arrl.org/lotw#download> .

This is in 2 parts. Firstly download the TQSL software (Trusted QSL) and this usually self installs. This is to be used in order to sign your logs so that they can be uploaded to the LoTW server.

Secondly, download TQSL certificates and keep in the same directory if possible as this will make it much easier to locate. This is used to request and manage certificates for your callsign and any deviations that may be applicable. i.e. /m, /p etc. From your TQSL file, you will request a certificate on-line. Then by mailing in your licence copy etc. your identity can be verified, so a password will be emailed usually within a few days. This password will then unlock your TQ5 file and will enable you to gain access to the LoTW website.

For those who are not very computer literate, don't worry, it is quite straight forward and a great step by step guide is available at : <http://www.arrl.org/lotw/getStartedGuide.pdf>

Logbook of the world does not try to replace the traditional paper QSL cards. Many still enjoy collecting the colourful and unusual cards that formed the tradition of this hobby.

In fact, it is encouraged that one continues with this time honoured tradition in addition to using LoTW.

Using LoTW saves QSL card collectors the hassle and worry of sending cards for verification for awards and quite often, confirmation via LoTW can be more efficient than by using the more traditional routes.

From my own experiences, one needed band slot was for a recent VK6 which I needed on 12m CW ; a few hours later I had this QSO confirmed.

Despite several direct QSL requests, I am still having great difficulty in getting a paper card from Pakistan, however, I have Pakistan confirmed and accredited to my DXCC totals due to LoTW.

Several of the more recent DXpeditions seem to give priority to LoTW users therefore leading to faster QSO confirmations. Regular uploads to LoTW usually minimises or reduces the bulk load of Buro cards from those that like to QSL every QSO.

Every LoTW confirmation is valid and can be used towards credit. In the event of a 'rare entity' the operation has already been approved and will be accepted for DXCC credit.

The return rate of LoTW confirmations appears to be about the 15% mark, so if one uploads 10,000 QSOs, expect about 1,500 confirmations.

Accurate logging is needed as both QSO details have to coincide; however, there appears to be a bit of a threshold regarding the time so try to ensure that you always log using GMT.

The band, date and mode DO have to match perfectly as any discrepancies will NOT result in a confirmation.

I hope that this gives a little insight to some; it is certainly a secure and efficient system and proves invaluable to anyone who is active on DXCC or any other ARRL award programme. Please visit <http://www.arrl.org/lotw> for full introduction and step by step guide.

ARRL Card Checker in EI

Cards for ARRL awards can be checked by:

David Deane, EI9FBB

7 Spriggs Rd, Gurannabraher, Cork City, Ireland
ei9fbb@oceanfree.net

Members Advertisements

Wanted, Clark type mast contact:
Charlie EI8JB, 087 6265418,
charlie.carolan@gmail.com

For Sale: Create RC5-1 heavy duty rotator in perfect condition with controller and manual. Price €250.00
Jeremy 083-3317710
(apologies for the incorrect telephone number in the last edition - EI4BZ)

PCSAT-1

PCSAT-1 should return to full operations on 9 Dec 08.

This should give a few weeks for some good 2m packet contacts and the SSET, and if the ISS is also operational on 145.825, then there is the possibility for some lucky 2-hop DX contacts via both birds. Combined, that is 12 opportunities per day for contacts without any change in the radio.

Operating PCSAT-1 is just like any 1200 baud 2 meter packet repeater. Uplink and downlink are on 145.825 and the path is VIA ARISS.

This path is identical to the ISS path so that you do not have to change anything between the two spacecraft.

(Until PCSAT-1 is reloaded, however, its digipeating alias is its FCC call W3ADO-1.) You can hear it every day, but its packets die before completion because of poor power budget.

I just commanded PCSAT-1 yesterday and all functions are normal.

All we need is the first full-sun orbit on the 9th of Dec to be able to do a full recovery; and then it should last for 2 weeks or more.

You can easily operate mobile using any of the APRS radios as is (D7, D700, D710, VX-8R, DR-135), or any other radio with an external TNC, or even any radio with no TNC if you use a sound-card packet application.

You can make two-way contacts, send beacons and bulletins and send your position so you will show up on the PCSAT web page <http://pcsat.aprs.org>

I'd suggest everyone plan on testing their emergency Email capability during this time. Lets set the time window of 12 to 15 December for everyone to try to send an Email via one of these birds.

Please see the Satellite Simulated Emergency Test www.aprs.org/sset.html.

You can use any packet system and no special software is required.

Bob, WB4APR

Phoenix Amateur Radio Club

Radio Rally

Sunday February 15th
at

Coolmine Community School
Dublin 15

Doors open for traders at 0830

Public admission at 0930

Admission 5.00

For table bookings or enquiries

Ring

Tony: 087-2439997

Tom: 01-8211043

Limerick Radio Club

Radio Hobbies and Electronics Fair

Sunday 8th March 2009

at the

Limerick Radisson SAS Hotel,
Ennis Road, Limerick

Keep an eye on www.qsl.net/ei4lrc/ for further details.

Limerick Radio Club

There was a good turn-out for the November meeting of the Club at the Limerick Institute of Technology.

Alan EI8EM gave a very interesting talk on HF DX-ing.

He suggested some very useful operating tips for anyone seriously interested in working DX and pile-ups.

Alan was speaking from first-hand experience of working DX, as he has worked 334 countries and is currently on the ARRL DXCC Roll of Honour.

Our sincere thanks to Alan for a very interesting and informative presentation.

The annual Christmas Quiz was held on Thursday 11 December once again under the stewardship of Pat (EI9GY) & Liam (EI4GB).

The Quiz, with prizes galore, was again a most enjoyable evening.

SCORPION TECHNOLOGY

For The Best Deals Around

EVEN LOWER PRICES FOR 2008

CB Radio's

Amateur Radio's

Accessories

www.scorpiontechnology.ie
sales@scorpiontechnology.ie

Irish Radio Transmitters Society

Annual General Meeting Weekend

April 25/26th 2009

**Shamrock Lodge Hotel,
Athlone.**

Dinner on Saturday night

Rally on Sunday morning

IRST AGM 1400 Sunday

*Hosted by
Shannon Basin Radio Club*

Irish Radio Transmitters Society

The Shop



10% discount for IRTS members

As an extra benefit of membership, IRTS has entered into a special arrangement with the Radio Society of Great Britain (RSGB) for IRTS members to get discounted Amateur Radio Books. This dedicated service is based online so is available to you 24 hours a day. The books are delivered by standard post direct to your door and attract a 10% discount for IRTS Members (Some exceptions apply). The range is wide with titles being stocked from RSGB, ARRL, DARC and many others.

Try it today

www.irtsshop.com

Experimenter - Ham

Wescom Ireland Ltd



**LOOK at our
Fantastic New Years Offers!!!**

IRELAND ONLY

ICOM

IC 7800 HF TCVR
IC 7700 HF TCVR
IC R 9500 professional receiver in stock

IC7800 HF TCVR MK1
(my own ex set)
IC 756 Pro 3 HF TCVR
IC-7400 HF TCVR
IC 7200 HF TCVR
IC-718 HF TCVR
IC 706 MK2G call for xmas special
IC 7000 demo unit call

All ICOM ATUs, PSUs in stock

All Icom-VHF /UHF Models in Stock
clearing the lot out – call for price

2 meter Linamp GS35 Linear - special
4/6 meter as above special

HF Amplifiers

TENNADYNE LOG PERIODIC ANTENNAS

T6 T8 T10 T12 € in stock

BIG RAK Rotator
RAK rotator

Create Rotator shop soiled new – €250

HiGain as above €250

4 Meter Dipoles & Yagis always available
4 Metre WESCOM FM 198CH sets

Loads of test gear, used but ideal for experi-
menters

Towers, Masts, staying gear, Earthing etc.

Minature tools - Proxxon

Solar voltaic panels , batteries, regulators &
know how.

Call us NOW to avail of great prices:

WESCOM IRELAND LTD Deerpark, Oranmore, Galway.

www.wescom.ie

Phone: +353 (0)91 790222/4 E-mail: info@wescom.ie

Mobile +353 87 2552578

JBT Trading

MI0JBT Jim Bob Traynor, Limavady, Northern Ireland

Specialising in the supply of new & used amateur and CB radio equipment.

Always wanted - good clean used equipment.

Tel/Fax: 028 77765045

Mobile: 0774 0721770

Email: jimbobtraynor@utvinternet.co.uk

www.mi0jbt.com



New Icom Radios

Price List 2008

IC-2200H	€234.00
IC-E2820	€494.00
IC-208	€286.00
IC-2725	€364.00
IC-703	€585.00
IC-706 MKIIG	€780.00
IC-7000	€1,040.00
IC-7400	€1,274.00
IC-756 PRO III	€2,275.00



New Yaesu Radios

Price List 2008

FT-7800	€221.00
FT-8800	€286.00
FT-8900	€312.00
FT-817ND	€455.00
FT-857D	€625.00
FT-897D	€615.00
FT-450	€690.00
FT-950	€1,300.00
FT-2000	€2,275.00
FT-2000D	€3,120.00

New Power Supplies.

Power-Mite - NF.

22 Amp continuous, Switch Mode Power Supply
Variable Voltage Mini Size, noise offset.....€78.95

Power-Max-25 - NF.

22 Amp continuous Switch Mode, Variable Voltage
Power Supply, Volt and Amp meters, Noise offset€117.50

Power-Max-45 - NF.

38 Amp continuous Switch Mode, Variable Voltage
Power Supply, Volt and Amp meters, Noise offset€156.00

W-25AM Watson

25A Variable Voltage Power Supply plus
Volt/Amp meters, 0 - 15V DC, Cigar Socket,
Front Panel Fuse. Size 240 x 15 x 230mm€117.00

W-30AM Watson 30A

Variable Voltage Power Supply plus
Volt/Amp meters, 35A Peak, Over current
protected, 3 sets of terminals, Cigar Socket,
Front panel fuse€156.00

EP-925 Manson 25A

3-15V Variable Power Supply, 30A Peak.
Malfunction protected, front panel terminals,
Dual meters for Volts and Amps.....€117.50

Used-Radio Price List

IC 765	€650.00
IC 7400.....	€1040.00
TS 2000	€1300.00
IC 756 PROIII 1 month old.	€1960.00
IC 702 Mk2G.....	€600.00
FT2000d 15 months old with DMU unit, SP2000 key board and monitor. Complete all leads	€3295.00
FT897D mint.....	€572.00
TS 850 SAT.....	€699.00
FT 767 SAT.....	€575.50
FT 920 mint	€780.00
SP 767 Speaker	€99.00
FP 902 ATU.....	€245.00
TS 570	€595.00
TS 440 SAT	€445.00

Trade-ins are always welcome.

All emails will be answered a.s.a.p.

Paypal and all major credit cards accepted

Merry Christmas

and a

Happy and Peaceful New Year

for 2009 from all at

JBT Trading

South East Communications

**Amateur Radio
Marine VHF
Shortwave Receivers
Scanning Receivers
GPS Systems**

**Gary O'Hanlon
Ashbury House
Dunmore East, Co. Waterford
Telephone 051-385853
087-2513772**

Used Equipment

AOR 3000A 0-2036 MHz, 400 memories. All Mode €649.00
AOR 5000. 0-2600MHz. 1000 mems. All Mode €1,249.00
AOR 7030 Award winning Rx. 0-30MHz Boxed/mint.... €699.00
Daiwa Power/SWR Meter. 1.8-200MHz Up to 2kW..... €125.00
Garmin Quest Handheld GPS. Ireland & Europe..... €125.00
Garmin Street Pilot 2610 GPS. Ireland & Europe..... €199.00
Icom IC756PRO. One owner. Auto ATU, DSP..... €1,099.00
Icom IC821H 2m/70cm 45/35w base multi-mode, €899.00
Icom IC-7000 25-2000MHz. Desktop Receiver €499.00
Icom IC-756PRO3. Demo Model..... €1,999.00
Icom PS-125, Matching PSU for 756 & 7400..... €249.00
Kenwood PHD7E, 2/70cm, H/H €299.00
Kenwood MC60 Desk Mic. Mint condition..... €125.00
Kenwood TM455E 45w, 70cm multi-mode, €299.00
Kenwood TS-790 2m/70cm/23cm. All mode base stn..... €999.00
Kenwood TS-850SAT, Auto ATU. Mint, Boxed..... €899.00
Kenwood TS870 SAT. Auto ATU, DSP €999.00
MFJ 949E 300w Antenna with dummy load..... €149.00
Realistic PRO 2006. 25-1300 MHz. 400 memories €175.00
Realistic PRO 2042 1000ch scanner. Base/mobile €249.00
Watson 22 Amp 0-15v PSU. Special offer - New!..... €79.00
Yaesu FT-847 Earth Station. HF/6m/2m/70cm. €1,099.00
Yaesu FT-990DC Auto ATU, fully filtered. Mint..... €999.00
Yaesu FT-1000MK5. 200w. All Mode..... €1,799.00
Yaesu FT-1000MK5 Field. 100w. Built in PSU/ATU.. €1,499.00
Yaesu VR5000. 0-2600MHz. Base/mobile. Mint. €499.00
Yaesu FRG-7700 Desktop 0-30MHz all mode Rx..... €249.00
Yaesu MD-1 Desk Mic for FT990, FT736, FT1000 etc..... €89.00

We now have 5,500 items in our price list. Ring for latest prices.
Above is a small selection from our used stock. Ring for latest.



AirNav RadarBox
the world's best selling and most advanced Real Time Virtual Radar. Real plug and play and best graphics by far.

Special this month at only €489.00



**W-8681 Wireless
Weather Station**

**Special Offer
This month only
€99.00**

**Yaesu FT-2000
Special Offer
€2,175.00**



**Yaesu FT-9000
Special Offer
€4,299.00**



**Thanks to all our customers for
their support during the past year.**

**Seasons Greetings to you and yours
and we look forward to being of
service again during 2009.**

**C.O.D. - Next Day Delivery
All major credit cards accepted**

*We stock a wide range of used equipment and a full range
of new Icom, Yaesu, Kenwood, Alinco, Watson, Cushcraft,
MFJ, Diamond, Uniden radios and accessories.*

www.sec.ie